



## **Workforce Innovations for a New Nevada - NSHE Capacity 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 per NRS 231.1415 who wishes to provide a workforce training program with WINN funding. A separate application is necessary for each training program. Applications requesting funding in excess of \$100,000 must be reviewed and approved by the Board.

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 supplemental information may be requested to complete the application process.

### **Authorized Provider Information**

#### **Institution Name**

Truckee Meadows Community College

#### **Address**

7000 Dandini Blvd., Reno, Nevada 89502

#### **Workforce Development Program Experience**

TMCC is Northern Nevada's jobs college, preparing qualified students for jobs in industries here in Nevada. We provide workforce training for priority sectors in advanced manufacturing, HVAC, refrigeration, welding, machining and auto/diesel. 95% of our students stay in Nevada after completion of their programs and build and support our local community. TMCC students, graduates and employees put more than \$678 million dollars into our region's economy.

TMCC has a demonstrated history of executing successful workforce development programs in career technical fields. We provide training for entry level employees seeking good living wage jobs with upward career mobility. We also provide opportunities for incumbent workers to return for upskilling, scaffolding upon previous credentials earned. We offer over 160 degrees & certificates in over 70 areas of study. In the machining department alone students can earn short-term skills certificates in CNC Milling, CNC Turning, a Certificate of Achievement in CNC Machining, 13 industry recognized NC3 certificates, and a machining, manufacturing technologies AAS degree. In the 2023 academic year, TMCC issued 37 awards in machining alone.

TMCC has a well-established machining advisory board; we rely heavily upon advisory board input to create, redesign and refine our workforce training programs. Business partners include: Hamilton, Gyford

Decor, Advanced Precision, Inc., Legacy CNC, U.S. Ordinance, Stratamet, and Samco Fabrication. We also work closely with our local workforce development agencies including NevadaWorks, EDawn, Manufacture Nevada, DETR, and EmployNV.

TMCC has a proven track record of managing workforce initiatives & grants including WINN awards, TAACCCT grants, the American Apprenticeship Initiative, GCCAP Grant for apprentices, the SANDI grant, Nevada Dept. of Education Carl D. Perkins grants, and several private donor workforce grants as well. We have established methods of tracking and documenting grant-related expenses, including required signatures of supervisors and grant PIs in the procurement process to ensure expenditures are reasonable and allowable. TMCC has an institutional research office that can conduct research queries and provide data for grant reporting. They have also created numerous data dashboards for employee use. The grants office tracks the reporting due dates for all grants and the PIs responsible submit them in a timely manner.

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**

TMCC's FY 23-24 budget is over 50 million dollars. TMCC's Foundation and Grants Office currently manages nearly 29 million dollars in federal, private, and state pass-through grant funding. Over the past 50 years, TMCC has successfully managed grants from the US Department of Education, Labor, Health and Human Services, State of Nevada Department of Education and Health & Human Services, and nationally and locally based corporate and non-profit donor funding. TMCC adheres to all federal grants management policies in 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

Additionally, TMCC is governed by the Nevada System of Higher Education (NSHE) and its Board of Regents. TMCC adheres to all NSHE student information and human resources policies and procedures related to accounting and procurement. NSHE utilizes Workday for budgeting and financial accounting, facilitating easier financial data collection allowing for effective project management across institutions.

Post Award grant management (a division of TMCC's foundation and grants) is responsible for grant compliance and works closely with TMCC Controllers Office, which is responsible for establishing sponsored accounts, financial reporting and fiscal compliance. The Deans and other principal investigators meet monthly with the Post Award team to ensure projects stay on track, discuss any issues that have emerged and to monitor expenditures. In the Technical Sciences Division, a new Project Director has been hired and will start June 12, 2024 to assist with oversight of these grant funded work plans, activities and outcomes.

## **Project Information**

### **Project Name**

TMCC-ACE Accelerated Early College Machining Program

### **Primary Economic Sector**

Advanced & General Manufacturing

### **Project Point of Contact**

Kim Harrell

### **Title**

Dean of Technical Sciences

### **Phone**

(775) 856-5307

### **Email**

kharrell@tmcc.edu

## Employer Partner(s)

### Company 1

**Company Name**

Gyford Decor

**Company Point of Contact**

Michael Eddins

**E-mail**

michaele@standoffsystems.com

**Job Titles to Be Filled**

CNC Machinists

**Number of Job Openings to be Assisted**

10

**Average Hourly Wage for Job Hires**

\$17.50 per hour

**Employer Commitment & Support Letter**

support lettterr gyford.docx

**Workforce Disruption - Prior 12 Months**

No

### Company 2

**Company Name**

Advanced Precision, INC.

**Company Point of Contact**

Jake Mathis

**E-mail**

jake@advancedprecisionnv.com

**Job Titles to Be Filled**

CNC Machinists

**Number of Job Openings to be Assisted**

12

**Average Hourly Wage for Job Hires**

\$18.00 per hour

**Employer Commitment & Support Letter**

support letter advanced precision.pdf

**Workforce Disruption - Prior 12 Months**

No

### Company 3

**Company Name**

Legacy CNC

**Company Point of Contact**

Juan Solis

**E-mail**

juan.s@legacy-cnc.com

**Job Titles to Be Filled**

CNC Machinists

**Number of Job Openings to be Assisted**

3

**Average Hourly Wage for Job Hires**

\$17.50 per hour

**Employer Commitment & Support Letter**

support letter legacy cnc.pdf

## Workforce Disruption - Prior 12 Months

No

## Company 4

### Company Name

Hamilton Company

### Company Point of Contact

Matthew Hamilton

### E-mail

matthew.hamilton@hamiltoncompany.com

### Job Titles to Be Filled

CNC Machinist

### Number of Job Openings to be Assisted

10

### Average Hourly Wage for Job Hires

\$21.50 per hour

### Employer Commitment & Support Letter

support letter Hamilton.pdf

## Workforce Disruption - Prior 12 Months

No

## Statement of Need

### Needs Assessment

According to the Bureau of Labor Market Statistics, employment trends remain strong for machinists, with projected growth in Nevada at 11%, higher than the national average through 2030. Additionally, 32,600 national machinist job openings are projected annually through 2032.

The TMCC-ACE Accelerated Early College Machining Training Program provides workforce preparation in advanced manufacturing, leading to living wage jobs with upward career mobility. Machinists in the 89502 area code command a median annual salary of \$49,450 which is higher than the state and the nation.

The Early College Machining Training Program is embedded in our community and, as a federally-recognized Hispanic Serving Institution (HSI), TMCC is breaking barriers to higher education for first generation college students, students from lower socioeconomic status and the large Hispanic population we serve here in Reno. Training our local community students for machining careers is a strategy for achieving equity in employment and access to higher education by evidence-based design. The dual credit course offerings are scheduled in a sequence that promote completion and entry into the workforce.

The only machine tool technology programs offered in Northern Nevada are at TMCC and Western Nevada College. IPEDS data from 2022 show that only 38 credentials were issued between the two institutions to provide training for all of Northern Nevada, including the outlying areas. According to O\*net Online, which draws data from IPEDs and the BLS, 50% of employers who are hiring require applicants to have some college or a post-secondary certificate, making TMCC's program a necessity. The employer partners who provided support letters for this application are all expecting to hire 48 CNC machinists over the next several years. It is likely other employers in the region have similar needs as these six who are rendering the supply of trained machinists from TMCC and WNC insufficient to meet projected annual demand.

## Program Objectives and Outcomes

### Program Overview

TMCC has had a longstanding relationship with ACE High School through a dual credit program. The

students earn college credit at TMCC and are assessed on the very same competencies as our college students. The program provides opportunities for sophomore, junior and senior students to take machining classes, giving them a leg up on completing the college's programs.

This year, TMCC worked collaboratively with ACE to build on this foundation to create an evidence-based Accelerated Early College Machining Program. Early College High School programs have been found to increase access for underrepresented students, increase student success and increase the likelihood of matriculation into college programs upon completion.<sup>1,2</sup> Such programs involve situating the early college program on a college campus, providing transportation to the college, and enrolling high school students in select courses that lead to completion of industry recognized credentials, college certificates and even degrees.<sup>3</sup>

The new ACE-TMCC Early College Program will focus on completion of college and industry recognized credentials for immediate employment. The program will run from the sophomore year of high school through the senior year with NC3 and TMCC certificates earned each year of the program as the students progress. Course and program learning outcomes are assessed through both practical skills demonstrations and written exams. Each cohort level is comprised of as many as 5 classes per year and 14 college credits per year. Students learn topics including, but not limited to: technical print reading, basic milling operations, facing, slotting, drilling, speed calculations, quality control, and safety procedures, creation of two-dimensional part geometry, generation and verification of 2 1/2 axis toolpath models, post processing of 2 1/2 axis NC codes, and axis motion control within a computer-aided manufacturing (CAM) system.

With the shift to the Early College High School model starting in Fall 2024, ACE High school students will earn the following credentials on or before the time they graduate from high school.

### **Employer Engagement**

TMCC machining faculty engage with employer partners on a regular basis to keep pace with changes in technology and understand the knowledge, skills and abilities program completers must have to be successful as machinists. Twice per year employers gather at our advisory board meetings to share how program graduates who have been hired by them are faring in their new jobs and to provide continued feedback on our curriculum. We note any skills gaps employers share and weave new activities, assignments, skills, and competencies into the curriculum to address them.

### **Capacity-Building Program Design**

These funds will help us expand access to our program, market it, and modernize it to ensure currency and accelerate training through this new Accelerated Early College Machining Program model. The curriculum has already been developed. Modernized equipment is needed to match the core competencies taught in the program and to what program completers will encounter in the field. Funding this equipment will allow us to maximize class size while ensuring sufficient hands on training to achieve mastery, thereby closing the gap between workforce supply and demand. The marketing funds will be used to develop inclusionary marketing materials for distribution at recruitment functions and display in the William N. Pennington Center of Applied Technology where the machining program is housed. Funds will also be used for faculty professional development to ensure teaching pedagogies, industry examples, and methodologies align with current practices in the field. Funds will not be used for staffing.

### **Will this program include funding for staff?**

No

### **Justification for Existing Staff**

N/A

### **Recruitment**

Currently, ACE High School students are recruited by ACE for this program. As of April 17, 2024, ACE has had more applications for the new incoming cohort than we could accept. We expect to enroll a very full sophomore cohort of 17 students starting in Fall 2024 in the hopes of obtaining these funds. The junior and senior cohorts will transition from the dual credit program to the Early College accelerated program taking 14 credits per year starting in Fall 2024 as well. With this capacity funding, we can continue to maximize the size of the incoming sophomore cohort closing the supply/demand gap for trained machinists.

**Outcomes**

Major goals and milestones with timelines for achievement. Increased capacity will commence by August 1, 2024.

Goals and Milestones	Timeline
9% enrollment capacity increase	August 1, 2024
Equipment acquisition	August 1, 2024
Students begin new curriculum	August 9, 2024
Equipment deployment	September 1, 2024
Faculty attend IMTS 2024 Conference	September 15, 2024
Marketing materials designed	October 1, 2024
Marketing materials deployed	January 15, 2025
5% completions increase	June 30, 2025
5% job placement increase	June 30, 2025

**Sustainability Plan**

This one-time only modernization and expansion of equipment will allow TMCC to sustain the Accelerated Early College Machining Program. ACE is committed to the accelerated model and enrolling students in 14 credits of instruction for each cohort. TMCC and ACE have codified an MOU for the new Early College model effective July 1, 2024. The program equipment will continue to be utilized for years to come. With increased revenue from additional enrollment, TMCC will plan for equipment replacement as needed.

The Vice President of Finance and Government Affairs has a strong interest in increasing funding for faculty professional development and has held financial team reviews with each of the division deans this year. He is requesting we identify recurring annual funding needs for professional development so that an allocation can be built into each division’s budget. This will help our machining faculty maintain currency in their fields going forward, sustaining this one-time investment in professional development.

The digital marketing materials developed through this one-time funding will be easily revised and updated for reproduction, sustaining the GOED investment.

**Is the program offered consistent with the Unified State Plan (WIOA)?**

Yes

**Supporting Documents**

- 51-4041.00 - Machinists.pdf
- Early College High School Model Research (1).docx
- EDAWN 2022 ESG Report.pdf
- Machining-Labor-Market-Salary-Graphics.docx

**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.

GOED seeks to read plans including efforts to address the needs of Veterans, Gender inclusion and penetration in non-traditional employment, recipients of public assistance, justice-involved citizens, racial and ethnically diverse students, and persons with disabilities.

### **Diversity Action Plan**

TMCC's demographics show that 51% of TMCC's student population are minorities (with 34% being Hispanic). 51% percent of the student population are first-generation and 54% percent of the student population were made up of women, and 46% were men. The 2023-2024 Nevada Department of Education data shows that ACE High School's student demographics are even more diverse than TMCC in terms of race ethnicity, with 56% being minorities and 50% of students being Hispanic. Further, 28% of students are on free and reduced lunch and 14% are English language learners. With 81% of ACE students being male, the marketing dollars requested in this proposal will be targeted toward women, so they can see themselves as represented in the field.

In keeping with TMCC's commitments to ensure an inclusionary environment that honors diversity, specific outreach activities and marketing efforts are in place to address target populations. TMCC offers programs & resources that support this commitment to a variety of diverse groups including but not limited to veterans, CTE gender equity needs, recipients of public assistance, justice-involved citizens, racial & ethnically diverse students, and students with disabilities. We are a Hispanic Serving Institution and recruit directly from the diverse community we serve. We plan on working with our special populations groups at TMCC to increase representation, inclusion, utilization and completion rates of the program.

We plan on promoting this Early College program through established pipelines including tours of our facility, the CTE Open House, interface with employers at our sector-specific Career Cafes, and the ACE freshman rotation which exposes prospective students to the machining program. We also plan on utilizing our CTE Assistant Director to support CTE gender equity needs by promoting this traditionally male careers to female students within the school district and in the community as a whole. We also want to make sure that our students who are recipients of public assistance are being encouraged to participate. So we plan on utilizing our Counseling Center and food bank (Wizards Warehouse) to promote the program and offer a space for our food insecure students to get the resources they need in order to be successful. A component of the project is the development of outreach activities and marketing efforts that will reach disabled, underrepresented, and racially/ethnically diverse student populations, from middle school and high school. TMCC will actively recruit in Spanish-language media and our diverse recruitment team will promote this program opportunity to diverse audiences at schools, career fairs, open houses, and during campus tours.

Through the orientation process, we will make sure that the additional students we are recruiting are made aware of our variety of resources that can assist them in meeting their educational & workforce goals including the Career Hub, Counseling Center, Financial Aid Office, Academic Advising, TRIO program, and the Diversity Center. Lastly, TMCC will continue to work to address the challenges of these non-traditional age students in terms of partnering with community organizations to remove the transportation barrier for the Early College Program.

### **Workforce Diversity Commitment Statement**

The Nevada System of Higher Education (NSHE) is committed to providing equal opportunity and access to programs and employment, and places of work and learning free of discrimination. Likewise, TMCC's policies regarding equal employment opportunity and affirmative action represents our commitment to supporting practices that seek to achieve equal opportunity in employment and advancement without regard for sex, age, race, color, religion, physical and mental disability, creed, national origin, veteran status, sexual orientation, genetic information, gender identity, or gender expression.

TMCC's Equity, Inclusion and Sustainability Office pledges to address, work with, and uphold a series of goals and commitments to ensure an inclusionary environment that honors diversity and integration. These goals and commitments include:

Building and maintaining a non-discriminatory environment in all facets of TMCC's programs as they relate to all members of TMCC including faculty, staff and students

To assist in developing diverse workforce, through outreach and affirmative action efforts, that reflect a demographic distribution in the service area, with regard to race, color, religion, gender, sexual orientation, disability, veteran status and age

To work with TMCC's faculty and staff to facilitate the integration of diversity content into curricula

To provide support to TMCC's enrollment management, recruitment and retention support efforts

To provide direction in establishing and maintaining clearinghouse of information and resources on issues of access, equity and inclusion and services to faculty, staff and students

To represent TMCC in the community at large in promoting and disseminating TMCC's commitment to equal opportunity, equity and inclusion at all levels of operations

### **Statement to Comply with Federal & State Law**

TMCC is an EEO/AA (equal employment opportunity/affirmative action) institution. TMCC does not discriminate on the basis of race, color, national origin, sex, disability, age, gender, including pregnancy-related condition, gender identity or expression, sexual-orientation, protected veterans status, genetics, or religion in their programs and activities and provides equal access to facilities to all. Similarly, there shall be no difference in the treatment of persons who file charges of discrimination, participate in a discrimination proceeding, or otherwise oppose discrimination. It is our policy to comply fully with non-discrimination provision of all state and federal regulations in all programs and activities, including, but not limited to recruitment, admission, financial aid, activities, hiring, promotions, training, terminations, benefits and compensation.

## **Request for Funding**

**Has any part of this program received prior capacity funding?**

No

**Total Project Cost**

\$300,000.00

**WINN Funding Request**

\$300,000.00

**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 submitted as often as monthly. What are your invoicing plans?**

Quarterly

### **Cost Estimates**

TMCC-Machining-FY23-24-WINN-Application-Budget-Template.xlsx



**Budget Narrative**

Machining Early College Budget Narrative (2).docx

## APPLICATION FOR WINN FUNDS - BUDGET BREAKDOWN

**APPLICANT NAME: TMCC**

**PROJECT NAME: TMCC-ACE Accelerated Early College Machining Program**

**PROJECT PERIOD: July 1, 2024 - June 30, 2025**

### PRIORITY PROGRAM COSTS

Enter the total cost for each line in the far right column

Total WINN Request

Candidate Assessment Fees

Curriculum Development and Instructional Services

Equipment or Technology for Training

\$263,750.00

**Priority Costs Subtotal: \$263,750.00**

### ALLOWABLE PROGRAM COSTS

Enter the total cost for each line in the far right column

Total WINN Request

Training Fees

\$15,000.00

Analysis of On-Site Training

Administrative or Support Personnel *(May not exceed 10% of total request)*

Instructional Facility Costs

Program Recruiting and Promotion

\$21,250.00

Other Necessary Costs

**Non-Priority Costs Subtotal: \$36,250.00**

**TOTAL WINN REQUEST: \$300,000.00**

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

## Accelerated Early College Machining Budget Narrative

Total WINN Request: **\$300,000**

### Priority Program Cost: **\$275,000**

- 1) *Equipment or Technology for Training: \$275,000*
- 2) *Training Fees: \$15,000*
- 3) *Program Recruitment and Promotion: \$21,250*

#### 1) **Equipment or Technology for Training: \$263,750**

TMCC's **Machining** program trains students to design and manufacture parts through programming and operating computer numerically controlled mills and lathes. TMCC trains students through a series of industry driven certifications and TMCC program pathways. We have worked to accelerate the turnout of trained graduates by strengthening our longstanding dual credit program with ACE High School into an Early College High School Program in which students will earn up to 16 TMCC and NC3 credentials by the time they complete high school, making them highly employable. While we have addressed the acceleration in training, we are lacking sufficient physical equipment necessary to deliver the curriculum. To keep pace with changing technology and support this new TMCC-ACE Early College High School, the college needs to make this workforce investment.

#### FY25 Total Equipment and Technology Cost: **\$263,750**

ITEM	CATEGORY	AMOUNT
HAAS Control Simulator (21)	SUPPLY	\$47,250
Royal 5C collet closures (5)	SUPPLY	\$20,000
ACER 1440	EQUIPMENT	\$17,500
VF2 Machining	EQUIPMENT	\$85,000
VF2 Machining	EQUIPMENT	\$85,000
VF2 high speed machining software	SOFTWARE	\$3,000
VF4 dynamic work offsets software	SOFTWARE	\$6,000
<b>TOTAL</b>		<b>\$263,750</b>

#### 2) **Training Fees: \$15,000**

Due to COVID, faculty are behind on being able to attend the annual IMTS Conference to stay on the cutting edge of technology in machining. To help our faculty maintain currency and teach the latest techniques, funding is needed for this purpose. Further, our faculty provide OSHA 10 training and issue certification cards. They must maintain their trainings to issue cards to students; safety is an essential component of the program. This funding investment is essential for program success. The budget for training will include registration costs and travel per the most economical means possible and aligned with GSA standards.

#### 3) **Program Recruitment and Promotion: \$21,250**

*In this digital age, digital ads engage students with content. Marketing funds will be used to contract for digital ads highlighting students in the program and employers who can speak to the value of the program, as well as career opportunities that result from training. We also need funds to design and produce rack cards and roll up banners for the program to distribute at outreach events to attract non-traditional and diverse students in our community. When students see themselves represented in non-traditional fields they believe they can be successful in those fields, contributing to the diverse workforce we seek.*

Version 4-26-24

Date: April 9<sup>th</sup>, 2024

Elaine Silverstone, Director of Workforce Development  
Governor's Office of Economic Development  
1 State of Nevada Way, 4<sup>th</sup> Floor Las Vegas  
Las Vegas, NV 89119

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

Dear Ms. Silverstone:

Advanced Precision Inc. is the largest CNC job shop in Northern Nevada. As a manufacturer of precision parts, we rely greatly on skilled labor which is mostly acquired through education facilities such as TMCC.

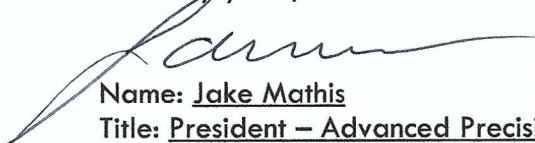
By this letter, we wish to express our support for the Truckee Meadows Community College (TMCC) Machining Program built to serve the needs of Advanced Manufacturing employers seeking high-skill workers in Nevada. This program offers high-wage opportunities to workers obtaining skills at TMCC. At our company, we anticipate approximately 12 such openings in the next 2 years and are confident that this program will help provide the highly-skilled workforce we will need. The new Early College High School model will help accelerate the turnout of trained workers.

Advanced Precision Inc. has been involved in many different ways with the machining program at TMCC. The owner served two years as Chairman of the Board of the Machine Tool Advisory Committee and although now off the board we continue to attend the meetings and provide input as to what we believe the industry needs from educators.

This application for WINN funds was developed through a collaborative partnership of regional stakeholders including TMCC, ACE High School, and Advanced Precision Inc. 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 TMCC and other stakeholders in this important effort.

Sincerely yours,



Name: Jake Mathis

Title: President – Advanced Precision

Hamilton Company, 4970 Energy Way, Reno NV USA

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Elaine Silverstone,  
Director of Workforce Development  
Governor's Office of Economic Development  
1 State of Nevada Way, 4th Floor  
Las Vegas, NV 89119

Reno, 15 April 2024

## Workforce Innovations for a New Nevada (WINN) Application

Dear Ms. Silverstone:

With this letter, we wish to express our support for the Truckee Meadows Community College (TMCC) Machining Program built to serve the needs of Advanced Manufacturing employers seeking high-skill workers in Nevada. This program offers strong-wage opportunities to workers obtaining skills at TMCC. At our company, we anticipate approximately 10 such openings in the next 5 years and are confident that this program will help provide the skilled workforce we will need. The new Early College High School model will help accelerate the turnout of trained workers. 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 TMCC and other stakeholders in this important effort.

Sincerely,



Matthew Hamilton  
President/Vice CEO



April 10, 2024

Elaine Silverstone, Director of Workforce Development  
Governor's Office of Economic Development  
1 States of Nevada Way, 4<sup>th</sup> Floor Las Vegas  
Las Vegas, NV 89119

Subject: Work Innovation for a New Nevada ( WINN ) Application

Dear: Ms. Silverstone

Legacy CNC is a machine shop serving numerous sectors such as Medical, Defense, and Food Industry based in Reno, NV. We are proud to be a local shop and we are committed to keeping machining jobs here in the Reno area.

By this letter, we wish to express our support for the Truckee Meadows Community College ( TMCC ) Machining Program built to serve the needs of Advanced Manufacturing employers seeking high-skill workers in Nevada. This program offers high-wage opportunities to workers obtaining skills At TMCC. At our company, we anticipate approximately 3 openings in the next 3 years and are confident that this program will help provide the highly skilled workforce we will need.

This application for WINN funds was developed through a collaborative partnership of regional stakeholders including TMCC, ACE High School, and Legacy CNC LLC. 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 TMCC and other stakeholders in this important effort.

Sincerely,

Juan Solis Ramirez  
Owner  
Legacy CNC LLC

April 8, 2024

Elaine Silverstone, Director of Workforce Development  
Governor's Office of Economic Development  
1 State of Nevada Way, 4<sup>th</sup> Floor Las Vegas  
Las Vegas, NV 89119

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

Dear Ms. Silverstone:

Gyford Décor is a manufacturer of high-end mounting and display solutions, based in Reno, NV. We have been machining our own parts for over 30 years and are a recognized industry leader. Gyford is proud to be an American manufacturer and we are committed to keeping machining jobs here in the Reno area.

By this letter, we wish to express our support for the Truckee Meadows Community College (TMCC) Machining Program built to serve the needs of Advanced Manufacturing employers seeking high-skill workers in Nevada. This program offers high-wage opportunities to workers obtaining skills at TMCC. At our company, we anticipate approximately 10 such openings in the next 5 years and are confident that this program will help provide the highly skilled workforce we will need. The new Early College High School model will help accelerate the turnout of trained workers.

This application for WINN funds was developed through a collaborative partnership of regional stakeholders including TMCC, ACE High School, and Gyford Décor. 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 TMCC and other stakeholders in this important effort.

Sincerely yours,

**Michael Ed d i n s**

Operations Manager,  
Gyford Decor



**O\*NET OnLine**

# Machinists

**51-4041.00**

Updated 2024

Set up and operate a variety of machine tools to produce precision parts and instruments out of metal. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, mathematics, metal properties, layout, and machining procedures.

**Sample of reported job titles:** CNC Machinist (Computer Numeric Controlled Machinist), CNC Machinist (Computer Numerically Controlled Machinist), Gear Machinist, Machine Repair Person, Machinist, Maintenance Machinist, Manual Lathe Machinist, Production Machinist, Tool Room Machinist

Summary

Details

Custom

Easy Read

Veterans

Español

Contents

## Occupation-Specific Information

### Tasks

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- + Calculate dimensions or tolerances, using instruments, such as micrometers or vernier calipers.
- + Machine parts to specifications, using machine tools, such as lathes, milling machines, shapers, or grinders.
- + Measure, examine, or test completed units to check for defects and ensure conformance to specifications, using precision instruments, such as micrometers.
- + Set up, adjust, or operate basic or specialized machine tools used to perform precision machining operations.
- + Program computers or electronic instruments, such as numerically controlled machine tools.

### Technology Skills

▼ 5 of 12 displayed

- + **Analytical or scientific software** — Armchair Machinist software; CNC Consulting Machinists' Calculator; Kentech Kipware Trig Kcalculator

- + **Computer aided design CAD software** — Autodesk AutoCAD 🔥; Dassault Systemes CATIA; PTC Creo Parametric; SolidCAM CAM software
- + **Computer aided manufacturing CAM software** — CNC Mastercam; Dassault Systemes SolidWorks 🔥; Mastercam computer-aided design and manufacturing software 📈; OneCNC CAD/CAM
- + **Enterprise resource planning ERP software** — ERP software; JobBOSS; SAP software 🔥
- + **Presentation software** — Microsoft PowerPoint 🔥



Hot Technologies are requirements most frequently included across all employer job postings.

[See all 8 Hot Technologies for this occupation.](#)



In Demand skills are frequently included in employer job postings for this occupation.

[See all 2 In Demand skills for this occupation.](#)

## Occupational Requirements

### Work Activities

▼ 5 of 20 displayed

- + **Controlling Machines and Processes** — Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- + **Getting Information** — Observing, receiving, and otherwise obtaining information from all relevant sources.
- + **Inspecting Equipment, Structures, or Materials** — Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- + **Identifying Objects, Actions, and Events** — Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.
- + **Monitoring Processes, Materials, or Surroundings** — Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

### Detailed Work Activities

▼ 5 of 31 displayed

- + Measure dimensions of completed products or workpieces to verify conformance to specifications.
- + Calculate dimensions of workpieces, products, or equipment.
- + Operate cutting equipment.
- + Operate grinding equipment.
- + Operate metal or plastic forming equipment.

### Work Context

▼ 5 of 29 displayed

- **Wear Common Protective or Safety Equipment such as Safety Shoes, Glasses, Gloves, Hearing Protection, Hard Hats, or Life Jackets** — 94% responded "Every day."
- **Spend Time Using Your Hands to Handle, Control, or Feel Objects, Tools, or Controls** — 89% responded "Continually or almost continually."
- **Importance of Being Exact or Accurate** — 61% responded "Extremely important."
- **Face-to-Face Discussions** — 78% responded "Every day."
- **Spend Time Standing** — 62% responded "Continually or almost continually."

## Experience Requirements

### Job Zone

<b>Title</b>	Job Zone Three: Medium Preparation Needed
<b>Education</b>	Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
<b>Related Experience</b>	Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.
<b>Job Training</b>	Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.
<b>Job Zone Examples</b>	These occupations usually involve using communication and organizational skills to coordinate, supervise, manage, or train others to accomplish goals. Examples include hydroelectric production managers, desktop publishers, electricians, agricultural technicians, barbers, court reporters and simultaneous captioners, and medical assistants.
<b><u>SVP</u> Range</b>	(6.0 to < 7.0)

### Training & Credentials

<b>State training</b>	Nevada	Go
<b>Local training</b>	ZIP Code 89502	Go
<b>Certifications</b>	Find certifications nationwide	
<b>State licenses</b>	Select a State	Go

# Apprenticeship Opportunities

▼ 5 of 10 displayed

Example apprenticeship titles for this occupation:

- Fixture Maker (Light Fix)
- Instrument Maker
- Instrument Maker & Repairer
- Machinist (Alternate Title: Precision Machinist)
- Machinist, Automotive

Specific title(s) listed above are vetted by industry and approved by the U.S. Department of Labor for use in a Registered Apprenticeship Program.

Start your career and build your skillset. Visit [Apprenticeship.gov](https://www.apprenticeship.gov) to learn about opportunities related to this occupation.

## Worker Requirements

### Skills

▼ 5 of 10 displayed

- ➕ **Operation and Control** — Controlling operations of equipment or systems.
- ➕ **Critical Thinking** — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
- ➕ **Monitoring** — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
- ➕ **Operations Monitoring** — Watching gauges, dials, or other indicators to make sure a machine is working properly.
- ➕ **Active Listening** — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

### Knowledge

^ All 4 displayed

- ➕ **Mathematics** — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- ➕ **Mechanical** — Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
- ➕ **Production and Processing** — Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.

- + **Design** — Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

## Education

How much education does a new hire need to perform a job in this occupation? Respondents said:

- 36% High school diploma or equivalent required ?
- 33% Post-secondary certificate required
- 17% Some college, no degree required ?

## Worker Characteristics

## Abilities

▼ 5 of 22 displayed

- + **Arm-Hand Steadiness** — The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
- + **Finger Dexterity** — The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
- + **Manual Dexterity** — The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
- + **Control Precision** — The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.
- + **Deductive Reasoning** — The ability to apply general rules to specific problems to produce answers that make sense.

## Interests

^ All 3 displayed

Interest code: **RCI**

? Want to discover your interests? Take the [O\\*NET Interest Profiler](#) at My Next Move.

- + **Realistic** — Work involves designing, building, or repairing of equipment, materials, or structures, engaging in physical activity, or working outdoors. Realistic occupations are often associated with engineering, mechanics and electronics, construction, woodworking, transportation, machine operation, agriculture, animal services, physical or manual labor, athletics, or protective services.
- + **Conventional** — Work involves following procedures and regulations to organize information or data, typically in a business setting. Conventional occupations are often associated with office work, accounting, mathematics/statistics, information technology, finance, or human resources.

- **Investigative** — Work involves studying and researching non-living objects, living organisms, disease or other forms of impairment, or human behavior. Investigative occupations are often associated with physical, life, medical, or social sciences, and can be found in the fields of humanities, mathematics/statistics, information technology, or health care service.

## Work Values

^ All 3 displayed

- **Support** — Occupations that satisfy this work value offer supportive management that stands behind employees. Corresponding needs are Company Policies, Supervision: Human Relations and Supervision: Technical.
- **Working Conditions** — Occupations that satisfy this work value offer job security and good working conditions. Corresponding needs are Activity, Compensation, Independence, Security, Variety and Working Conditions.
- **Independence** — Occupations that satisfy this work value allow employees to work on their own and make decisions. Corresponding needs are Creativity, Responsibility and Autonomy.

## Work Styles

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- **Attention to Detail** — Job requires being careful about detail and thorough in completing work tasks.
- **Dependability** — Job requires being reliable, responsible, and dependable, and fulfilling obligations.
- **Independence** — Job requires developing one's own ways of doing things, guiding oneself with little or no supervision, and depending on oneself to get things done.
- **Analytical Thinking** — Job requires analyzing information and using logic to address work-related issues and problems.
- **Innovation** — Job requires creativity and alternative thinking to develop new ideas for and answers to work-related problems.

## Workforce Characteristics

## Wages & Employment Trends

**Median wages** \$23.32 hourly, \$48,510 annual  
(2022)

**State wages**

Nevada

Go

**Local wages**

ZIP Code

Go

**Employment** 327,000 employees

(2022)

**Projected growth**  Average (2% to 4%)  
(2022-2032)

**Projected job openings** 32,600  
(2022-2032)

**State trends**

**Top industries**  
(2022)

[Manufacturing](#)

Source: Bureau of Labor Statistics [2022 wage data](#) and [2022-2032 employment projections](#). "Projected growth" represents the estimated change in total employment over the projections period (2022-2032). "Projected job openings" represent openings due to growth and replacement.

## Job Openings on the Web

**State job openings****Local job openings**

## More Information

## Related Occupations

- 51-9161.00 [Computer Numerically Controlled Tool Operators](#)
- 51-4034.00 [Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic](#)
- 51-4035.00 [Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic](#)
- 51-4081.00 [Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic](#)
- 51-4111.00 [Tool and Die Makers](#)

## Professional Associations



**Disclaimer:** Sources are listed to provide additional information on related jobs, specialties, and/or industries. Links to non-DOL Internet sites are provided for your convenience and do not constitute an endorsement.

### National Associations

- [American Mold Builders Association](#)
- [Association for Manufacturing Technology](#)
- [Fabricators and Manufacturers Association](#)
- [International Association of Machinists and Aerospace Workers](#)

- [Manufacturing Institute](#) 

## **Accreditation, Certification, & Unions**

- [International Union, United Automobile, Aerospace and Agricultural Implement Workers of America](#) 
- [National Institute for Metalworking Skills](#) 



Machinist: 51-4041.00 Labor Market and Salary Graphics

Nevada Employment Trends

51-4041.00 - [Machinists](#)

View trends for state: Nevada

Go

In Nevada:

Employment (2020)	1,030 employees
Projected employment (2030)	1,140 employees
Projected growth (2020-2030)	11%
Projected annual job openings (2020-2030)	120

In the United States:

Employment (2022)	327,000 employees
Projected employment (2032)	333,300 employees
Projected growth (2022-2032)	<div><div></div><div></div><div></div></div> 2% Average
Projected annual job openings (2022-2032)	32,600

Nevada source: Projections Central [2020-2030 long-term projections](#). United States source: Bureau of Labor Statistics [2022-2032 employment projections](#). "Projected growth" represents the estimated change in total employment over the projections period. "Projected annual job openings" represent openings due to growth and replacement.

Local Wages

51-4041.00 - [Machinists](#)

Wages for state: Nevada

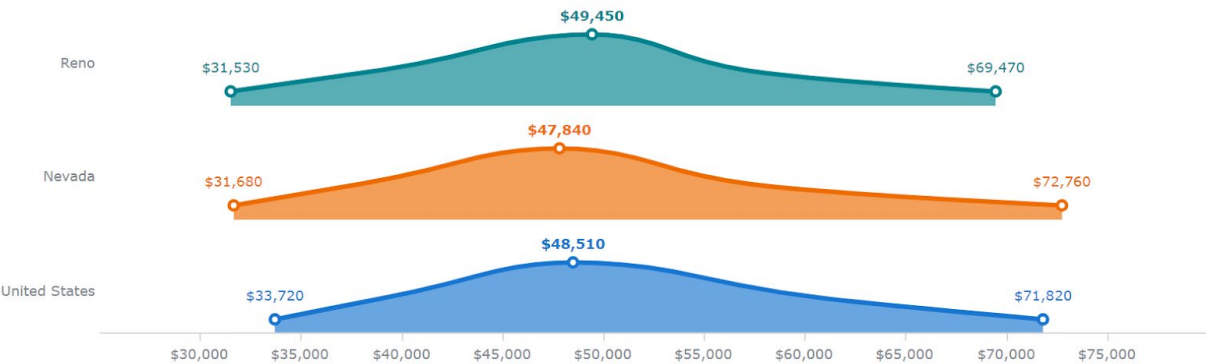
Go

Wages near ZIP Code: 89502

Go

Annual Wages

Hourly Wages



**Early College High School Model Research**  
**Corresponds to referenced items in Statement of Need**

- 1 [Policy Analysis - Early College High Schools: Model Policy Components](#)
- 2 [The Influence of Earning an Industry Certification in High School on Going to College: The Florida CAPE Act](#)
- 3 [Attainment for All: Postsecondary Pathways, The Early College High School Model](#)