Division of Apprenticeship Standards (DAS)

Apprenticeship Program Summary Sheet

To: Adele Burnes, Chief
From: Damion Rodriguez
CC: Program Planning and Review
Date: April 17, 2025

Program Name: Precision Machining Apprenticeship Program
Industry: Advanced Manufacturing
DAS File No.: 101370
Grant Awardee: ☐ No ☒ Yes CAI-2023

Actions:

- ☒ Proposed new apprentice program
- ☐ Existing apprenticeship program adding new occupations
- ☐ Existing apprenticeship program expanding area of operations
- ☐ Existing apprenticeship program changing work processes on approved occupations.

Labor Organizations Representing Any of the Apprentices:

None

Request for Approval under Labor Code 3075:

Precision Machining Apprenticeship Program is not intended to train in the building and construction trades and is not eligible to dispatch apprentices to projects with public works, prevailing wage or skilled and trained workforce requirements within the meaning of Labor Code sections 1720 and 3075 and will not train or dispatch apprentices in the building and construction trades or firefighters' occupations.

Comments:

Career and Technical education modules along with apprenticeship have long been thought of as not equivalent to, or as successful as, 4-year traditional education modules. However, the facts have been borne out to prove that is far from the case. Precision Machining Apprenticeship Program is making "access, accessible", and ensuring that those from communities that are often overlooked, under-exposed to options, and underrepresented in this work force, have a voice, and have a place in the economy that they help build. And not only are our graduates given immediate access to a well-paying, high demand careers as machinist, they will be able to do so with a State of California approved Apprenticeship. The Precision Machining Apprenticeship Program has built very solid relationships with the

employers we have partnered with over the past 50 years. These employers support our operation, students, our growth, this apprenticeship program, and our mission to change lives through the power of outcome-based training that leads to career placement.

Precision Machining Apprenticeship Program will oversee the apprenticeship program herein and seeks approval from the Department of Industrial Relations, Division of Apprenticeship Standards for the following:

Proposed Occupation, Wage Rate & O*Net Code:

- Precision Machining Technician O*Net: 51-4081.00
  Professional Worker Wage: $23.00 per hour
  Proposed Apprentice Wage: $21.42 per hour
  Proposed No. of Apprentices: 10

Proposed Employers:

- SP Craftech I LLC – 2941 E. La Jolla St., Anaheim, CA 92806-1306

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Precision Machining Apprenticeship Program Standards

1717 S. Grove Avenue, Ontario, CA 91761
(562) 404-4295
DSkinner@4thwatcheducation.org

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Article I Jurisdiction

These standards shall apply to the employer signatory hereto and to all apprentice agreements hereunder.

Area Covered by Standards: All CA Counties

Article II Purpose and Policy

The parties hereto declare it to be their purpose and policy to establish an organized, planned system of apprenticeship, conducted as an education sponsored, employer-based undertaking.

These standards have, therefore, been adopted and agreed upon under the Shelley-Maloney Apprentice Labor Standards Act of 1939, as amended, to govern the employment and training of apprentices in the trade, craft, or occupation defined herein, to become effective upon their approval.

Article III Craft, Trade or Occupation, Related and Supplemental Instruction, Term of Apprenticeship, Ratio, Wage Schedule, and Work Training

Occupation: Precision Machining Technician
O*Net Code: 51-4081.00
Attachment: B

Article IV Responsibilities of Program Sponsor

The responsibilities of the apprenticeship committee shall be to:

1) supervise the administration and enforcement of these standards;
2) adopt such rules and regulations as are necessary to govern the program provided that the rules and regulations do not conflict with these standards and provide a copy of said rules and regulations to each apprentice;
3) make periodic evaluations of each apprentice's on-the-job training and related and supplemental instruction;
4) provide reasonably continuous employment to all apprentices in its employ;
5) ensure safe work site facilities, skilled workers as trainers at the work site, and safe equipment sufficient to train apprentices;
6) determine the qualifications of apprentice applicants and ensure fair and impartial treatment of applicants for apprenticeship selected through uniform selection procedures;

7) file a signed copy, written or electronic, of each apprentice agreement with the Division of Apprenticeship Standards, within 30 days of execution, with copies to all parties to the agreement;
8) establish and utilize a procedure to record and maintain all records of the apprentice's worksite job progress and progress in related and supplemental instruction;
9) establish and utilize a system for the periodic review and evaluation of the apprentice's progress in job performance and related instruction;
10) discipline apprentices, up to and including termination, for failure to fulfill their obligations on-the-job or in related instruction, including provisions for fair hearings;
11) annually prepare and submit a Self-Assessment Review as well as a Program Improvement Plan to the Chief of the Division of Apprenticeship Standards;
12) ensure training and supervision, both on the job and in related instruction, in first aid, safe working practices and the recognition of occupational health and safety hazards;
13) ensure training in the recognition of illegal discrimination and sexual harassment;
14) establish an adequate mechanism to be used for the rotation of the apprentice from work process to work process to assure the apprentice of complete training in the apprenticeable occupation;
15) ensure the program's ability, including financial ability, and commitment to meet and carry out its responsibilities under federal and state law and regulations applicable to the apprenticeable occupation and for the welfare of the apprentice;
16) ensure there is meaningful representation of the apprentice in the management of the program;
17) adopt changes to these standards, as necessary, subject to the approval of the parties hereto and the Chief of the Division of Apprenticeship Standards.
18) abide by any and all relevant California Labor Codes and California Code of Regulations regarding apprenticeship.

Article V Definition of an Apprentice

An apprentice is a person at least 18 years of age, who has met the requirements for selection under the selection procedures of participating employer, who is engaged in learning a designated craft or trade and who has entered into a written apprentice agreement under the provisions of these standards.

Article VI Duties of an Apprentice

Each apprentice shall satisfactorily perform all work and learning assignments both on the job and in related instruction and shall comply with the rules, regulations and decisions of the apprenticeship committee.

Article VII Apprentice Agreement

1) Each apprentice agreement shall conform to the State law governing apprentice agreements, shall be signed by the program sponsor and by the apprentice and shall remain in effect during a lay-off unless cancelled.
2) Each apprentice shall be furnished with a copy of or be given an opportunity to study these standards before registration. These standards shall be considered a part of the apprentice agreement as though expressly written therein.

Article VIII Termination

1) During the probationary period, an apprentice agreement shall be terminated by the apprenticeship committee at the request in writing of either party. After such probationary period, an apprentice agreement may be terminated by the Administrator by mutual agreement of all the parties thereto or cancelled by the Administrator for good and sufficient reason.
2) Disciplinary proceedings for apprentices shall be duly noticed in writing to such individuals. The Division of Apprenticeship Standards shall attend all such proceedings.

Article IX Controversies

All controversies or differences concerning apprentice agreements that cannot be adjusted locally by the program sponsor or otherwise shall be submitted to the Administrator for determination.

Article X Certificate of Completion

1) In addition to previous on-the-job training and related school instruction, which is of an approved nature, the Apprentice shall have completed not less than an additional six (6) months as an apprentice under the laws of the State of California and demonstrated mastery of the skills and knowledge of the prescribed program.
2) In recognition of unusual ability and progress, the program sponsor or apprenticeship committee may decrease the term of apprenticeship for an individual apprentice not more than twelve and one-half percent (12½%).
3) Upon evidence of satisfactory completion of apprenticeship, and upon the recommendation of the program sponsor, each apprentice will be issued a Certificate of Completion by the authority of the Chief of the Division of Apprenticeship Standards and the Interagency Advisory Committee on Apprenticeship.

Article XI Equal Opportunity in Apprenticeship

Precision Machining Apprenticeship Program will not discriminate against apprenticeship applicants or apprentices based on race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age for individuals over forty years of age, military or veteran status, or sexual orientation.

Precision Machining Apprenticeship Program will take affirmative steps to provide equal opportunity in apprenticeship.

Article XII Written Applications

Applications can be obtained and will be accepted Monday through Friday, 9:00 am to 4:00 pm, at 1717 S. Grove Avenue, Ontario, CA 91761.

Article XIII Records

All records will be maintained, in written or electronic form, for five (5) years and kept at:

Precision Machining Apprenticeship Program
1717 S. Grove Avenue
Ontario, CA 91761

Article XIV Annual Compliance

Precision Machining Apprenticeship Program will submit an annual compliance report to the Division of Apprenticeship Standards as requested by the Division.

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Precision Machining Apprenticeship Program agrees to accept electronic signatures for the Division of Apprenticeship Standards and all related Division of Apprenticeship Standards documents.

The foregoing standards are hereby agreed to and adopted by Precision Machining Apprenticeship Program on March 10, 2025.

Employer Organization

Precision Machining Apprenticeship Program

1717 S. Grove Avenue, Ontario, CA 91761

_____ _____

Ms. Danielle Skinner, President Date

The foregoing apprenticeship standards, being in conformity with the applicable California Labor Code, California Code of Regulations and Federal Regulations, are hereby approved

_____.

(DAS approval date)

_____ _____

Adele Burnes, Chief Date

Division of Apprenticeship Standards

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Attachment B
Training Schedule and Working Conditions

Precision Machining Apprenticeship Program

Occupation

Occupation: Precision Machining Technician
O*Net Code: 51-4081.00

Article I Term of Apprenticeship and Probation

The standard term of apprenticeship shall be competency based with 725 related and supplemental instruction (RSI) hours and completed within approximately 24 months.

The period of probation shall be reasonable in relation to the full apprenticeship term, with full credit given for such period toward completion of the apprenticeship, and in no event shall exceed the shorter of 25 percent of the length of the program or one (1) year. The period of probation shall be six (6) months.

Article II Wage Schedule

Professional Worker Wage:

$ 23.00 per hour effective 2/7/2025.

Apprentice Wage and Advancement Schedule:

In no case shall an Apprentice receive a starting wage that is less than the applicable federal, state, or local entity (city or county) minimum wage, whichever is higher for the county or city where the apprentice is working. The applicable minimum wage law shall establish the effective date of the minimum wage.

To advance from one period to the next, the apprentice shall have met the following requirements:

1st period	0 - 12 Competency Requirements	$ 21.42 /hour
2nd period	13 - 23 Competency Requirements	$ 22.00 /hour

Hours of Work and Working Conditions and Overtime Provision:

Eight (8) hours of labor constitutes a day's work. Employment beyond eight (8) hours in any workday or more than six (6) days in any workweek requires the employee to be compensated for the overtime at not less than one and one-half times the employee's regular rate of pay for all hours worked in excess of eight (8) hours, up to and including 12 hours in any workday, and for the first eight (8) hours worked on the seventh (7) consecutive day of work in a workweek; and double the employee's regular rate of pay for all hours worked in excess of 12 hours in any workday and for all hours worked in excess of eight (8) on the seventh (7) consecutive day of work in a workweek. If employers utilize an alternative workweek schedule in accordance with the California Industrial Welfare Commission Orders, the overtime will be determined and paid in accordance with the applicable alternative workweek provisions.

The workday and workweek and all other conditions of employment for apprentices shall conform to all applicable laws and regulations and shall not be greater than for those of a professional worker.

Overtime shall not be allowed if it will interfere with or impair the training or be detrimental to the health and safety of the apprentice.

ARTICLE III Work-Training

1) The employer shall see that all apprentices are under the supervision of a qualified professional worker or instructor and shall provide the necessary diversified experience and training in order to develop the apprentice into a proficiently skilled worker, as outlined herein.
2) Each apprentice shall be trained in the use of new equipment, materials and processes as they come into use in the occupation.
3) The major categories in which apprentices will be trained (although not necessarily in the order listed) are as follows:

Competency Check List

Demonstrates Fundamentals: Apprentice can perform the task with some coaching.
Proficient in Task: Apprentice performs task properly and consistently.
Completion Date: Date apprentice completes final demonstration of competency.
Detailed Work Activities: Initial and date each task when Competency Check List has been completed.

Professional Competencies and Performance Areas

1. Mathematics:

a. Basic mathematics featuring the use of whole and fractional numbers.
b. Decimal equivalents for shop fractions.
c. Decimal numbers and use of calculators.
d. Metric measurements and conversion of metric to standard and standard to metric.

e. Basic algebra as applied to formula and arranging formula for use in calculating shop measurements. The understanding of Algebra is the first key to learning and using shop mathematics.
f. Plane geometry including the Pythagorean Theorem. Geometry is the second key to success in machinist training. Geometry is the most important of the math skills and is essential for reading and understanding shop drawings and blueprints.
g. Trigonometry is the final key to success in being successful in the machine tool industry. You will learn how to calculate angles, find the length of triangle sides and do mathematics required to operate CNC Machines.

2. Blueprint Reading (The language of the machine shops and manufacturing):

a. Basic types of blueprint lines and their applications.
b. Setup and arrangement of the drawing views.
c. Finding missing views and lines.
d. Geometric Dimensioning and Tolerancing for interpretation of drawing dimensions.
e. Reading part and assembly drawings to be able to find dimensions required to machine details and parts.

3. Shop Theory:

a. Safety First rules and requirements are stressed from the first day of class. You are taught method of handling sharp tools, lifting material, working on drill presses, operating lathes and milling machines.
b. Machine operation theory, which will include spindle speeds and machine feeds for various materials.
c. Threading and the thread forms used in the manufacturing industries.
d. Tooling and Fixturing used in the machine shop.
e. Materials used in manufacturing and the machining characteristics of the materials.

4. Computer Numerical Control (CNC):

a. Basic codes and commands for operation of the CNC equipment.
b. Programming examples and lessons on how to program and understand the programming commands.
c. Machine startup and setup procedures, both Milling machines and lathes.
d. Setting tool length offsets.
e. Setting part offsets.
f. Basics of Computer-Aided Design (CAD) and Computer-Aided Manufacturing (CAM) programming.

ARTICLE IV Related Instruction

Apprentices shall satisfactorily complete prescribed courses of related and supplemental instruction, which will not be less than 144 hours per year. Related and supplemental instruction will be provided by Machinist Career College and overseen by Los Angeles Unified School District Office of Transitional Programs.

Time spent in related and supplemental instruction may not be compensated.

Approximate Hours

Module I: Introduction to Machine Technology I 145 Hours

Students will be able to demonstrate a level of competency in basic mathematics, blueprint reading, and shop theory. Students will perform addition, subtraction, multiplication, and division of fractions and mixed numbers. Upon completion, students will demonstrate understanding of orthographic projections with standard and metric blueprints, precision measuring tools, and rounding off of decimal equivalents of combined operations. Shop Theory is demonstrated through shop safety and the use of basic hand tools, drilling machines, and saws.

Module II: Conventional Mills I & Lathe I 145 Hours

Students will be able to demonstrate a level of competency in basic algebraic expressions, operations, proportions, ratios, cutting speeds and feeds. Blueprint reading is demonstrated through the identification of various dimensional methods, first and third angle projections, and identifying various views in a multi-view drawing. Upon completion of this module, the students will be able to demonstrate a level of competency in fasteners, cutting fluids, lathe safety, lathe operation and setup, mill safety, mill operation and setup.

Module III: Conventional Mills II, Lathe II, & Surface Grinders 145 Hours

Students will be able to demonstrate a level of competency in basic mathematic analysis of circles, tangents circles, angles and sides of right triangles through trigonometric functions. Application of this understanding is demonstrated by reading various multi-view drawings of threaded parts, reference dimensions, finish symbols, processing secondary operations of various materials and heat treat. Upon completion of this module, students will be able to demonstrate a level of competency in cutting threads, precision grinding wheel composition and application, and advanced conventional mill and lathe operation.

Module IV: CNC Mills & CNC Lathes 145 Hours

Students demonstrate a level of competency of mathematics in practical machine application. As an introductory course to Computer Numerical Control (CNC), students will develop spatial recognition using the Cartesian coordinate system to demonstrate setup and operates a CNC Machine. Complex and practical machine applications will utilize absolute and incremental programming positioning. Repetitive features and detailed drawings are reviewed for advanced blueprint reading techniques in thread identification, inclined and oblique planes, auxiliary views, and the interpretation of blueprint revisions. Upon completion of this module, students will be able to demonstrate the use of jigs and fixtures, quality control, CNC milling

programming, setup, and operation. Nontraditional machining techniques and occupations will be discussed in CNC operations.

Module V: CNC Mills II, CNC Lathes II, EDM & Robotics 145 Hours

Students demonstrate a level of competency of mathematics in advanced blueprint reading of analytical geometry. Basic understanding of Geometric Dimensioning and Tolerancing (GD&T) is applied by identifying datum's, material conditions, form tolerances, locational tolerances, and run out tolerances in part setup and operation of a CNC machine. Upon completion of this module, the students will be able to demonstrate a level of competency in CNC Milling and Lathe programming, setup, and operation for the first article inspection. CNC Wire Electrical Discharge Machining (Wire EDM), and an introduction to automated manufacturing in robotics and portable coordinate measuring machine (CMM) devices.

Total: 725 Hours

ARTICLE V Ratio

The ratio of apprentices to professional workers shall be:

1) Ratio #1: Each professional worker may supervise (1) apprentice(s)