

# **Registered Apprenticeship Standards**

# For Programs with Collective Bargaining Agreements

Local Apprenticeship Standards

# BOILERMAKERS WESTERN STATES APPRENTICESHIP PROGRAM

Occupation(s): BOILERMAKER II

O\*NET-SOC Code(s): 47-2011.00 RAPIDS Code(s): (0041)

U.S. Department of Labor Office of Apprenticeship	
Approved by the U.S. Department of Labor Office of Apprenticeship	
Registered By:	-
Signature:	_
Title:	
Office of Apprenticeship	
Date:	
Registration Number:	$\Box$ Check here if these are revised standards



## TABLE OF CONTENTS

<b>SECTION I - STANDARDS OF APPRENTICESHIP.</b>	2
SECTION II - APPENDICES AND ATTACHMENTS	6
SECTION III – VETERANS' EDUCATIONAL ASSISTANCE	7
SECTION IV PART 1 - COLLECTIVE BARGAINING PROVISIONS	8
SECTION IV PART 2 - SIGNATURES	8

# SECTION I - STANDARDS OF APPRENTICESHIP 29 CFR § 29.5

**A. Responsibilities of the sponsor:** *Boilermakers Western States Apprenticeship Program* must conduct, operate, and administer this program in accordance with all applicable provisions of Title 29 Code of Federal Regulations (CFR) part 29, subpart A and part 30, and all relevant guidance issued by the Office of Apprenticeship (OA). The sponsor must fully comply with the requirements and responsibilities listed below and with the requirements outlined in the document "Requirements for Apprenticeship Sponsors Reference Guide."

# Sponsors shall:

- Ensure adequate and safe equipment and facilities for training and supervision and provide safety training for apprentices on-the-job and in related instruction.
- Ensure there are qualified training personnel and adequate supervision on the job.
- Ensure that all apprentices are under written apprenticeship agreements incorporating, directly or by reference, these Standards and the document "Requirements for Apprenticeship Sponsors," and that meets the requirements of 29 CFR § 29.7. Sponsors may utilize Form ETA 671 for this purpose and is available upon logging into RAPIDS.
- Register all apprenticeship Standards with the U.S. Department of Labor, including local variations, if applicable.
- Submit apprenticeship agreements within 45 days of enrollment of apprentices.
- Arrange for periodic evaluation of apprentices' progress in skills and technical knowledge and maintain appropriate progress records.
- Notify the U.S. Department of Labor within 45 days of all suspensions for any reason, reinstatements, extensions, transfers, completions, and cancellations with explanation of causes. Notification may be made in RAPIDS or using the contact information in Section K.
- Make a good faith effort to obtain approval for educational assistance for a veteran or other individual eligible under chapters 30 through 36 of title 38, United States Code, and will not deny the application of a qualified candidate who is a veteran or other individual eligible for educational assistance described in the above for the purpose of avoiding making a good faith effort to obtain approval.
- Provide each apprentice with a copy of these Standards, Requirements for Apprenticeship Sponsors Reference Guide, Appendix A, and any applicable written rules and policies, and require apprentices to sign an acknowledgment of their receipt. If the sponsor alters these Standards or any Appendices to reflect



changes it has made to the apprenticeship program, the sponsor will obtain approval of all modifications from the Registration Agency, then provide apprentices a copy of the updated Standards and Appendices and obtain another acknowledgment of their receipt from each apprentice.

• Adhere to Federal, State, and Local Law Requirements -- The Office of Apprenticeship's registration of the apprenticeship program described in these Standards of Apprenticeship on either a nationwide basis (under the National Program Standards of Apprenticeship) or within a particular State, and the registration of individual apprentices under the same program, does not exempt the program sponsor, and/or any employer(s) participating in the program, and/or the individual apprentices registered under the program from abiding by any applicable Federal, State, and local laws or regulations relevant to the occupation covered by these Standards, including those pertaining to occupational licensing requirements and minimum wage and hour requirements.

The program's Standards of Apprenticeship must also conform in all respects with any such applicable Federal, State, and local laws and regulations. Any failure by the program to satisfy this requirement may result in the initiation of deregistration proceedings for reasonable cause by the Office of Apprenticeship under 29 CFR § 29.8.

# B. Minimum Qualifications - 29 CFR §29.5(b)(10)

An apprentice must be at least <u>18</u> years (Enter an age of at least 16 years) of age, except where a higher age is required by law, and must be employed to learn an apprenticeable occupation. Please include any additional qualification requirements as appropriate (optional):

*The additional qualification requirements as appropriate are listed below:* 

There is an educational requirement of: High School Diploma or Equivalent Educational Attainment

# C. Apprenticeship Approach and Term - 29 CFR § 29.5(b)(2)

The apprenticeship program(s) will select an apprenticeship training approach. The approach is notated in Appendix A, APPRENTICESHIP APPROACH.

# D. Work Process Schedule and Related Instruction Outline - 29 CFR § 29.5(b)(4)

Every apprentice is required to participate in related instruction in technical subjects related to the occupation. Apprentices *will not* be paid for hours spent attending related instruction classes. The Work Process Schedule and Related Instruction Outline are outlined in Appendix A.

# E. Credit for Previous Experience - 29 CFR § 29.5(b)(12)

Apprentice applicants seeking credit for previous experience gained outside the apprenticeship program must furnish such transcripts, records, affidavits, etc. that may be appropriate to substantiate the claim. *Boilermakers Western States Apprenticeship Program* will evaluate the request for credit and make a determination during the apprentice's probationary period.

# F. Probationary Period - 29 CFR § 29.5(b)(8) and (20)

Every applicant selected for apprenticeship will serve a probationary period, which may not exceed 25 percent of the length of the program, or 1 year whichever is shorter. The probationary period is notated in Appendix A, PROBATIONARY PERIOD.

# G. Ratio of Apprentices to Journeyworkers - 29 CFR § 29.5(b)(7)

Every apprenticeship program is required to provide an apprenticeship ratio of apprentices to journeyworkers for adequate supervision. The ratio is notated in Appendix A, RATIO OF



# APPRENTICES TO JOURNEYWORKERS.

# H. Apprentice Wage Schedule - 29 CFR § 29.5(b)(5)

Apprentices must be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journeyworker wage rate. The progressive wage schedule is notated in Appendix A, APPRENTICE WAGE SCHEDULE.

# I. Equal Employment Opportunity and Affirmative Action

# 1. Equal Opportunity Pledge - 29 CFR §§ 29.5(b)(21) and 30.3(c)(1)

Boilermakers Western States Apprenticeship Program will not discriminate against apprenticeship applicants or apprentices based on race, color, religion, national origin, sex (including pregnancy, gender identity, and sexual orientation), sexual orientation, genetic information, or because they are an individual with a disability or a person 40-years old or older.

Boilermakers Western States Apprenticeship Program will take affirmative action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required under Title 29 of the Code of Federal Regulations, part 30.

# 2. Affirmative Action Program - 29 CFR §§ 29.5(b)(21), 30.4-30.9

Boilermakers Western States Apprenticeship Program acknowledges that it will adopt an affirmative action plan in accordance with Title 29 CFR §§ 30.4-30.9 (required for sponsors with five or more registered apprentices by two years from the date of the sponsor's registration or by two years from the date of registration of the program's fifth (5th) apprentice). Information and technical assistance materials relating to the creation and maintenance of an affirmative action plan will be made available on the Office of Apprenticeship's website.

# 3. Selection Procedures - 29 CFR § 30.10

Every sponsor will adopt selection procedures for their apprenticeship programs, consistent with the requirements set forth in 29 CFR § 30.10(b). The selection procedures for each occupation for which the sponsor intends to train apprentices are notated in Appendix A, SELECTION PROCEDURES.

# J. Complaint Procedures - 29 CFR §§ 29.5(b)(22), 29.7(k), 29.12, and 29 CFR § 30.14

If an applicant or an apprentice believes an issue exists that adversely affects the apprentice's participation in the apprenticeship program or violates the provisions of the apprenticeship agreement or Standards, the applicant or apprentice may seek relief. Nothing in these complaint procedures precludes an apprentice from pursuing any other remedy authorized under another Federal, State, or local law. Below are the methods by which apprentices may send a complaint:

For all issues covered by a Collective Bargaining Agreement (CBA), apprentices must seek resolution through the applicable procedures contained in the CBA. (*if applicable, see Requirements for Apprenticeship Sponsors Reference Guide*)

**1. Complaints regarding discrimination.** Complaints must contain the complainant's name, address, telephone number, and signature, the identity of the respondent, and a short description of the actions believed to be discriminatory, including the time and place. Generally, a complaint must be filed within **300** days of the alleged discrimination. Complaints of discrimination should be directed to the following contact:



U.S. Department of Labor, Office of Apprenticeship 200 Constitution Ave. NW, Washington, DC, 20210

Telephone Number: (202) 693-2796

Email: Address: ApprenticeshipEEOcomplaints@dol.gov

Point of Contact: Director, Division of Registered Apprenticeship and Policy

Attn: Apprenticeship EEO Complaints

You may also be able to file complaints directly with the EEOC, or State fair employment practices agency.

**2. Other General Complaints**. The sponsor will hear and attempt to resolve the matter locally if written notification from the apprentice is received within 15 days of the alleged violation(s). The sponsor will make such rulings as it deems necessary in each individual case within 30 days of receiving the written notification:

Name: COLLIN KEISLING

Address: PO Box 1386
Page, AZ 86040-1386

Telephone Number: (928) 645-0277

Email Address: westernstatesjac@gmail.com

Any complaint described that cannot be resolved by the program sponsor to the satisfaction of all parties may be submitted to the Registration Agency provided below in Section K.

# K. Registration Agency General Contact Information 29 CFR § 29.5(b)(17)

The Registration Agency is the United States Department of Labor's Office of Apprenticeship. General inquiries, notifications and requests for technical assistance may be submitted to the Registration Agency using the contact information below:

Name: **Douglas Howell** 

Address: 90 7th Street, Suite 17-100

San Francisco, CA 94103

Telephone Number: <u>(415)</u> 625-2230 Email Address: <u>howell.douglas@dol.gov</u>

# L. Reciprocity of Apprenticeship Programs 29 CFR § 29.13(b)(7)

States must accord reciprocal approval for Federal purposes to apprentices, apprenticeship programs and standards that are registered in other States by the Office of Apprenticeship or a Registration Agency if such reciprocity is requested by the apprenticeship program sponsor.

Program sponsors seeking reciprocal approval must meet the wage and hour provisions and apprentice ratio standards of the reciprocal State.

## **SECTION II - APPENDICES AND ATTACHMENTS**

- Appendix A Work Process Schedule, Related Instruction Outline, Apprentice Wage Schedule, Ratio of Apprentices to Journeyworkers, Type of Occupation, Term of Apprenticeship, Selection Procedures, and Probationary Period
- Appendix B ETA 671 Apprenticeship Agreement and Application for Certification of Completion of Apprenticeship



(To be completed after registration)
 □ Appendix C - Affirmative Action Plan (Required within two years of registration unless otherwise exempt per 29 CFR §30.4(d))
 □ Appendix D - Employer Acceptance Agreement (For programs with multiple-employers only)



# SECTION III - VETERANS' EDUCATIONAL ASSISTANCE AS MANDATED BY PUBLIC LAW 116-134 (134 STAT. 276)

Pursuant to section 2(b)(1) of the Support for Veterans in Effective Apprenticeships Act of 2019 (Pub. L. 116-134, 134 Stat. 276), by signing these program Standards the program sponsor official whose name is subscribed below assures and acknowledges to the U.S. Department of Labor's Office of Apprenticeship the following regarding certain G.I. Bill and other VA-administered educational assistance referenced below (and described in greater detail at the VA's website at: https://www.va.gov/education/eligibility) for which current apprentices and/or apprenticeship program candidates may be eligible:

- (1) The program sponsor is aware of the availability of educational assistance for a veteran or other eligible individual under chapters 30 through 36 of title 38, United States Code, for use in connection with a registered apprenticeship program;
- (2) The program sponsor will make a good faith effort to obtain approval for educational assistance described in paragraph (1) above for, at a minimum, each program location that employs or recruits an veteran or other eligible individual for educational assistance under chapters 30 through 36 of title 38. United States Code: and
- (3) The program sponsor will not deny the application of a qualified candidate who is a veteran or other individual eligible for educational assistance described in paragraph (1) above for the purpose of avoiding making a good faith effort to obtain approval as described in paragraph (2) above.

**NOTE:** The aforementioned requirements of Public Law 116-134 shall apply to "any program applying to become a registered apprenticeship program on or after the date that is 180 days after the date of enactment of this Act" (i.e., September 22, 2020). Accordingly, apprenticeship programs that were registered by a Registration Agency before September 22, 2020, are not subject to these requirements.



# **SECTION IV PART 1 - COLLECTIVE BARGAINING PROVISIONS**

The employer or employer association must furnish to any union that is a collective bargaining agent of the employees to be trained a copy its application for registration and of these Standards, including all attachments. The *Boilermakers Western States Apprenticeship Program* and hereby adopt these Standards of apprenticeship on this <u>14th</u> day of <u>April, 2022</u>.

Signature of Management (designee)	Signature of Labor (designee)
Tom J. Baca Printed Name	Ed McWhorter  Printed Name
	Signature of Labor (designee)
Printed Name	Printed Name

# **SECTION IV PART 2 - SIGNATURES**

# OFFICIAL ADOPTION OF APPRENTICESHIP STANDARDS

The undersigned sponsor hereby subscribes to the provisions of the foregoing Apprenticeship Standards formulated and registered by *Boilermakers Western States Apprenticeship Program*, on this 14th day of *April, 2022*The signatories acknowledge that they have read and understand the document titled "Requirements for Apprenticeship Sponsors Reference Guide" and that the provisions of that document are incorporated into this agreement by reference unless otherwise noted.

Signature of Sponsor (designee) Signature of Sponsor (designee)

Tom J. Baca Ed McWhorter **Printed Name** Printed Name



# **Appendix A**

# WORK PROCESS SCHEDULE AND RELATED INSTRUCTION OUTLINE



# Appendix A

# WORK PROCESS SCHEDULE BOILERMAKER II

O\*NET-SOC CODE: 47-2011.00 RAPIDS CODE: 0041

This schedule is attached to and a part of these Standards for the above identified occupation.

## 1. APPRENTICESHIP APPROACH

Time-Based

# 2. TERM OF APPRENTICESHIP

The term of the apprenticeship is generally four (4) years with an OJL attainment of 6,000 hours, supplemented by the minimum required 576 hours of related instruction.

The employer shall be responsible for the training of the apprentice on-the-job. The supervisor of the apprentice(s) designated by the employer shall, with the advice and assistance of the AJAC, be responsible for the apprentice's work assignments' ensuring the apprentice is working under the supervision of a skilled journeyworker, evaluation of work performance, and completion and submittal of progress reports to the AJAC.

No apprentice will be allowed to work without direct journeyworker supervision.

# 3. RATIO OF APPRENTICES TO JOURNEYWORKERS

The apprentice to journeyworker ratio is: 1 Apprentice to 3 Journeyworkers.

# 4. APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journeyworker wage rate, which is: \$49.05 in the State of California.

Name: BOILERMAKER II

Period	% of Journey worker wage	Duration (Hours)	Wage (Hourly)	Description
1st	62%	1000 Hours	\$30.41	California wage rates
2nd	65%	1000 Hours	\$31.88	
3rd	75%	1000 Hours	\$36.79	
4th	80%	1000 Hours	\$39.24	
5th	85%	1000 Hours	\$41.69	
6th	90%	1000 Hours	\$44.15	
End Wage	100%	6000 Hours	\$49.05	



Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journeyworker wage rate, which is: \$34.98 in the State of Colorado.

Name: **BOILERMAKER II** 

Period	% of Journey worker wage	Duration (Hours)	Wage (Hourly)	Description
1st	70%	1000 Hours	\$24.49	Colorado wage rates
2nd	75%	1000 Hours	\$26.24	
3rd	80%	1000 Hours	\$27.98	
4th	85%	1000 Hours	\$29.73	
5th	90%	1000 Hours	\$31.48	
6th	95%	1000 Hours	\$33.23	
End Wage	100%	6000 Hours	\$34.98	

Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journeyworker wage rate, which is: \$48.15 in the State of Alaska.

Name: **BOILERMAKER II** 

Period	% of Journey worker wage	Duration (Hours)	Wage (Hourly)	Description
1st	70%	1000 Hours	\$33.71	Alaska wage rates
2nd	75%	1000 Hours	\$36.11	
3rd	80%	1000 Hours	\$38.52	
4th	85%	1000 Hours	\$40.93	
5th	90%	1000 Hours	\$43.34	
6th	95%	1000 Hours	\$45.74	
End Wage	100%	6000 Hours	\$48.15	

# 5. PROBATIONARY PERIOD

Every applicant selected for apprenticeship will serve a probationary period of <u>1,500 hours of on-the-job learning or one (1) year, whichever is shorter</u>.



# 6. SELECTION PROCEDURES

See selection procedures on page 18.



# **Work Process Schedule**

# **BOILERMAKER II**

RAPIDS Code: 0041

Job Description: Construct, assemble, maintain, and repair stationary steam boilers and boiler house auxiliaries. Align structures or plate sections to assemble boiler frame tanks or vats, following blueprints. Work involves use of hand and power tools, plumb bobs, levels, wedges, dogs, or turnbuckles. Assist in testing assembled vessels. Direct cleaning of boilers and boiler furnaces. Inspect and repair boiler fittings, such as safety valves, regulators, automatic-control mechanisms, water columns, and auxiliary machines.

Job Zone Three: Medium Preparation Needed. These occupations usually involve using communication and organizational skills to coordinate, supervise, manage, or train others to accomplish goals. Examples include hydroelectric production managers, travel guides, electricians, agricultural technicians, barbers, court reporters, and medical assistants.

O\*NET Code: 47-2011.00

Аp	Apprenticeship Type:					
	<b>C</b> or	npetency-Based	☑ Time-Based	☐ Hybrid		
De	taile	d Work Activities			Hours	
A.	Cai	re and Maintenance of To	ools and Equipment		100	
	•	Learning names of Tools	and Equipment			
	•	Learning the use of Too	ls and Equipment			
	•	Care and Maintenance				
	•	Handing out tools and in	nventory			
В.	Rig	ging and Bull Gang			1000	
	•	Unloading and Handling				
	•	Use of Hoisting Equipme	ent			
		1. Come-along				
		2. Chain falls				
		<ul><li>3. Erection and dismant</li><li>4. Working with derricks</li></ul>	_			
		5. Use of signals and saf				
			1			
	•	Use of Tackle				
		1. Block and Tackle				
		2. Chokers, cables and s	lings			
		3. Proper use of clamps				
		4. Safety				



	A A a visa Disasa	
	<ul><li>Moving Pieces</li><li>1. Rollers</li></ul>	
	2. Levers	
	3. Use of tackle, come-alongs and chain falls	
	4. Safety	
C.	General Erection	1000
	Steel Erection in our jurisdiction	
	1. Designating location of members	
	2. Raising in place	
	3. Use of spud-wrench, bull, and draft-pins, wedges, clips, and saddles	
	4. Alignment	
	a. Use of level, plumb, tape and rule	
	5. Connecting	
	a. Drilling, reaming, chipping, caulking, and grinding	
	b. Bolting up	
	c. Welding (tack)	
	d. Riveting	
	Setting Drums and Headers	
	1. Use of hoisting equipment and entering devices	
	2. Use of water level, plumb, and measuring devices	
	Tube Installation	400
D.		400
	• Entering	
	Use of come-alongs and entering devices	
	2. Lipping	
	Setting and Aligning  1 Use of spaces.	
	1. Use of spacers	
	2. Use of strong backs	
	Catting Drawer Steel	
	Getting Proper Stock     Signale (sound and light)	
	1. Signals (sound and light)	
	Come-along     Riece of stock	
	4. Boiler code	
	• Rolling	
	1. Use of erectors' guides, or	
	2. Proper selection of the following:	
	a. Expanders, roller, pins, and mandrels	



	<ul> <li>3. Use of rolling machines <ul> <li>a. Pneumatic, electric and ratchet</li> <li>b. Lubricants</li> </ul> </li> <li>4. Use of gauges and signals</li> <li>5. Heavy tube sheets</li> <li>6. Entering and connecting baffles</li> <li>7. Testing <ul> <li>a. Visual</li> <li>b. Water (use of hydrostatic pump)</li> <li>c. Air</li> <li>d. Use of gauges</li> </ul> </li> </ul>	
E.	<ul> <li>Use of Blueprint and Layout</li> <li>Use of prints to designate the following: <ol> <li>Locating parts and unloading</li> <li>Moving parts to job location</li> <li>Parts to be hoisted into position</li> <li>Use of benchmark</li> <li>Symbols</li> </ol> </li> </ul>	400
	<ul> <li>Layout</li> <li>1. Use of precision measuring devices</li> <li>2. Marketing for correction, re-cutting and fitting</li> <li>3. Directing, cutting, and fitting of parts</li> <li>4. Geometric measuring of parts, tube holes, etc.</li> <li>5. Working with foreman</li> </ul>	
F	Wolding and Cutting	3000
<b>F</b> .	<ul> <li>• Any and all forms of electric welding</li> <li>1. Proper adjustment of machines</li> <li>2. Application and use of electrodes on all metals, ferrous and non-ferrous</li> <li>3. Metal spraying and hard facing</li> </ul>	3000
	<ul> <li>Acetylene</li> <li>1. Proper adjustment, gauges and torch</li> <li>2. Selection of tips</li> <li>3. Handling of torch and application</li> <li>a. Ferrous and non-ferrous metals</li> </ul>	
	<ul> <li>Cutting</li> <li>1. Acetylene</li> <li>2. Arc (cutting and gouging)</li> <li>3. Machine Methods</li> <li>4. Adjusting and operating of equipment</li> </ul>	



a. Ferrous b. Non-ferrous		
G. Nuclear Plant Construction-Reactors	100	
<ul><li>Theory-Types</li><li>1. Power</li><li>2. Propulsion</li><li>3. Heating</li></ul>		
Research		
<ul> <li>Problems peculiar to Atomic Energy</li> <li>1.Those elements which would not be covered in other sections, i.e., radiation, radiation protection</li> <li>2. Requirements for joints of high intensity</li> </ul>		
Total Hours	6000	



# **Suggested Related Instruction Outline**

A course of study should include some of the following based on the Classification of Instructional Programs (CIP) Code 48.0801

**Definition:** A program that prepares individuals to apply technical knowledge and skills to fabricate and repair steam boiler components. Includes instruction in principles of steam power, material selection, welding, riveting, sealing materials, pressure testing, pipefitting, and applicable codes and standards.

**Approximate Total Hours: 576** 

**Provider:** Boilermakers Western States Apprenticeship Program819 N Navajo Dr Unit 6 Page, AZ 86040

Subject/Knowledge	Course Number: 1
Year 1	
	<b>Hours:</b> 144

- Rigging and Boilermaker Safety
  - Lesson 1-1
  - A. Protective Clothing
  - B. Safety with Lifting Equipment
  - C. Safety with Ladders and Staging
  - D. Safety with Tools
  - E. Fire Preventions and Control
- Applied Math I
  - Lesson 1-2
  - A. The Language of Math
  - B. Counting
  - C. Place Value
  - D. Addition and Subtraction
  - E. Multiplication and Division
  - F. Multiples and Factors
  - G. Negative Factors
  - H. Other Number Concepts
  - I. Operating with Signed Numbers
  - J. Axioms and Laws
- Applied Math II
  - Lesson 1-3
  - A. Fractions
  - B. Types of Fractions
  - C. Operations with Fractions
  - D. Decimal Fractions
  - E. Equivalent Decimals
  - F. Operation with Decimals
- Applied Math III



# Lesson 1-4

- A. Proportion
- B. Percentage
- C. Changing a Percent to a Decimal
- D. The Three Percentage Cases
- E. Fractural Percents
- F. Calculating with Approximate Numbers
- G. Prime Numbers
- H. Exponents and Radicals
- Applied Math IV

Lesson 1-5

- A. Basics of Algebra
- B. Multiplication
- C. Division
- D. Basics of Plane Geometry
- E. Basics of Solid Geometry
- F. Triangulation (Trigonometry)
- Applied Math V

Lesson 1-6

- A. Measuring
- B. Review of Decimals
- C. Angular Measurements
- D. Formulas and Equations in Review
- E. Signs of Operations
- F. Graphs
- G. Math Aids
- Applied Metric Math

Lesson 1-7

- A. Metrics (SI) in the United States
- B. Advantage of Metrics
- C. Metric (SI) Conversions
- D. Metrics (SI) in Shop or Field
- E. Metrics for the Boilermakers/Welder
- F. The Transition Period and the Future of Metrics
- Rigging: Basic Principles

Lesson 1-8

- A. Basic Rigging Concepts
- B. Simple Tools
- Rigging: Ropes
  - A. Wire Rope
  - B. Fiber Rope
  - C. Chains
- Rigging: Tools



Lesson 1-10

- A. Slings
- B. Rigging Hardware
- C. Reeving
- D. Hoists and Winches
- E. Skids, Rollers, Jacks and Cribbing
- F. Ladders and Scaffolding
- Rigging: Cranes and Other Lifting Equipment

Lesson 1-11

- A. Mobile Cranes
- B. Tower Cranes
- C. Monorails and Underhung Cranes
- D. Derricks
- E. Hoists
- F. Overhead Cranes
- G. Helicopter Cranes
- Rigging: Equalizing and Distributing Loads

Lesson 1-12

- A. Distributing Weight to the Rigging
- B. Basic Methods of Equalizing and Distributing Loads
- C. Strength and Stability During Operating

Subject/Knowledge	Course Number: 2
Year 2	
	Hours: 144

- Mechanical Drawing: Tools and Lettering
  - Lesson 2-1
  - A. Equipment
  - B. Drafting Materials
  - C. Basic Techniques of Drafting
  - D. Lettering
  - E. Styles of Lettering
  - F. Characteristics of Good Lettering
  - G. Tools of Lettering
- Mechanical Drawing: Geometric Construction

Lesson 2-2

- A. Methods of Bisecting a Straight Line
- B. Bisecting an Arc
- C. Drawing Perpendicular Lines
- D. Drawing Parallel Line to Another Given Line
- E. Methods of Dividing a Line into Equal Parts
- F. Drawing and Bisecting an Angle



- G. Trisecting an Acute Angle
- H. Finding the Center of a Circle
- I. Bisecting an Angle with an Inaccessible Vertex
- J. Constructing a Triangle Given its Three Sides
- K. Polygon Construction Tangency
- L. Constructing Tangent Lines and Arcs
- M. Geometric Solids
- Mechanical Drawing: Orthographic

Lesson 2-3

- A. Theory of Projection and Drawings
- B. Theory of Orthographic Projection
- C. Multi-View Line Projection
- D. Surface Projection
- E. Line Description
- F. Orthographic Drawing Techniques
- G. Projecting the Views on Paper
- H. Sections
- I. Reading Orthographic Drawings
- J. Conventional Procedures on Orthographic Drawings
- K. Accepted Violations of True Projection
- L. Treatment of Unimportant Intersections
- M. Aligned Views
- N. Conventional Procedure for Radially Arranged Features
- O. Representations of Fillets and Rounds
- P. Conventional Breaks
- Q. Conventional Method of Alternative Positions
- R. Conventional Representation
- S. The Orthographic Drawing Plate
- Mechanical Drawing: Isometric and Oblique

Lesson 2-4

- A. Pictorial Drawing
- B. Isometric Projection
- C. Isometric Drawing
- D. Oblique Projection
- E. Oblique Drawings
- Mechanical Drawing: Dimensioning

Lesson 2-5

- A. Theory of Dimensioning
- B. The Language of Dimensioning
- C. Units of Measurement Used in Dimensioning
- D. Standard Dimensioning Practices
- E. Dimensioning Application
- F. Dimensioning Special views
- G. Limit Dimensioning
- H. Welding Symbols



- Mechanical Drawing: Field Sketching
  - Lesson 2-6
  - A. Sketching Materials
  - B. Sketching Guidelines
  - C. Beginning Line Exercises
  - D. Multi View Orthographic Sketches
  - E. Orthographic Projection for Sketching
  - F. Pictorial Sketching
  - G. Oblique Sketching
  - H. Perspective Sketching
- Layout Procedures and Techniques
  - Lesson 2-7
  - A. Hammers, Sledges and Mauls
  - B. Struck or Hammered Tools
  - C. Cutting Hand Tools
  - D. Taps and Dies
  - E. Screwdrivers
  - F. Holding Tools
  - G. Miscellaneous Hand Tools
- Boilermaker Hand Tools
  - Lesson 2-8
  - A. Layout Tools
  - B. Layout Work
- Boilermaker Power Tools
  - Lesson 2-9
  - A. Electric Power Tools
  - B. Air (Pneumatic Tools)
  - C. Tube Tools and Their function
- Construction Materials
  - Lesson 2-10
  - A. Basic Construction Material
  - B. Metal Production
  - C. Metal Processing Methods
- Construction Materials II
  - Lesson 2-11
  - A. Mechanical Properties
  - B. Chemical Properties of Metal
  - C. Physical Properties of Metals
  - D. Fiberglass Reinforced Plastics
- Blueprint Reading: Structural
  - Lesson 2-12
  - A. Structural Steel
  - B. Structural Drawings



C. Drawing Structural Steel Shapes

D. Connectors

E. Connections

Subject/Knowledge	Course Number: 3
Year 3	
	<b>Hours:</b> 144

• Boiler Systems and Components I

Lesson 3-1

- A. The Boiler
- B. Fire Tube Boilers
- C. Water Tube Boilers
- D. Water Tube Boiler Components
- E. Fuels and Fuel Burning Systems
- Boiler Systems and Components II

Lesson 3-2

- A. Boiler Circulation
- B. Shop Assembled Boilers
- C. Systems for the Pulp and Paper Industry
- D. By Product Fueled Boilers
- E. Waste Heat Boilers
- Nuclear Power

Lesson 3-3

- A. The Principles of Nuclear Energy
- B. Nuclear Fuels
- C. Nuclear Reactors
- D. Health Physics and Radiation Protection
- Tanks, Vessels, and Other Components

Lesson 3-4

- A. Field Erected Storage Tanks
- B. Basic Construction Techniques
- C. Stacks and Liners
- Blueprint Reading: Boilermaker

Lesson 3-5

- A. Erection Plans
- B. How Blueprints are Made
- Boiler: Installation

Lesson 3-6

- A. Field Inspection
- B. Shop Fabrication



- C. Site Preparation
- D. Erecting Structural Steel Supports
- E. Installing the Steam Drum
- F. Installing the Upper Headers
- G. Installing the Down Comers
- H. Installing Super-heater and Re-heater Modules
- I. Installing Water Walls
- J. Installing the Wind-Box
- K. Installing the Suction Manifold
- L. Installing the Pre-heater and Economizer
- M. Installing Ductwork
- N. Installing Lower Water-Walls
- O. Additional Construction
- P. Preparing the Boiler for Testing
- Q. Cleanliness of Boiler Components
- R. Hydrostatic Testing
- S. Installing Insulation and Casing
- Boiler: Repair and Maintenance
  - Lesson 3-7
  - A. Repairs
  - B. Alterations
  - C. Fiberglass Reinforced Plastics
- Welding and Cutting: Basic
  - Lesson 3-8
  - A. Weld-able Metals
  - B. The Welding Process
  - C. Oxyfuel Gas Welding
  - D. ARC Welding
  - E. Resistance Welding
  - F. Thermit Welding
  - G. Brazing and Braze Welding
  - H. Soldering
  - I. Electron Beam Welding
  - J. Laser Beam Welding
  - K. Cutting Process
  - L. Welded Joint Design
  - M. Types of Welds
  - N. Welding Position
  - O. Welders and Welding Operators
- Welding and Cutting: Blueprint Reading
  - Lesson 3-9
  - A. Welding Symbols
  - B. Non-preferred Symbols
  - C. Nondestructive Testing Symbols
- Welding and Cutting: Safety



# Lesson 3-10

- A. General Welding and Cutting Safety
- B. The Welding Environment
- C. Fire Prevention and Protection
- D. Tool and Equipment Usage
- E. Other Safety Considerations
- F. Safety in Welding and Cutting Processes
- G. Gases Used in ARC Process
- H. First Aid
- Metallurgy: Welding

Lesson 3-11

- A. Fundamentals of Metallurgy
- B. Structure Metal
- C. Metallurgy and Heat Training
- D. Metallurgy of the Welded Metal
- E. Welding Stresses, Warpage, Distorting, and Cracks
- Metallurgy: Weld-ability of Metals

Lesson 3-12

- A. Classifying a Code Systems for Metals
- B. Identification of Metals
- C. Filler Materials
- D. Welding Characteristics of Metals and Alloys

Subject/Knowledge	Course Number: 4
Year 4	
	Hours: 144

• ARC Welding: Equipment

Lesson 4-1

- A. Power Sources
- B. ARC Welding Consumables
- ARC Welding: Shielded Metal I

Lesson 4-2

- A. SMAW Procedure
- B. Weld Joints
- ARC Welding: Shielded Metal II

Lesson 4-3

- A. Heat Effects in Shielded Metal ARC Welding
- B. Shielded Metal ARC Welding of Ferrous Metals
- C. Shielded Metal ARC Welding of Nonferrous Metals
- D. Troubleshooting when Welding with the SMAW Process



• ARC Welding: Gas Tungsten (TIG)

Lesson 4-4

- A. GTAW Welding Techniques
- B. Metals and Gas Tungsten ARC Welding
- ARC Welding: Gas Metal ARC (MIG)

Lesson 4-5

- A. Process Variations-Metal Transfer
- B. Gas Metal ARC Welding Equipment
- C. Consumable Used GMAW
- D. GMAW Process Variables
- E. Weld Bead Characteristics
- F. Welding Procedures
- G. Welding Conditions
- H. Mig Weld Defects-Their Causes and How to Correct Them
- I. Mig Spot Welding
- J. Vapor Shielded ARC Welding
- ARC Welding: Other Processes

Lesson 4-6

- A. Submerged ARC Welding
- B. Flux Cored ARC Welding
- C. Plasma ARC Welding
- Cutting Oxyfuel I

Lesson 4-7

- A. Equipment and Supplies
- B. Manual Cutting Procedures
- C. Cutting and Steel Plate
- D. Machine Torch Cutting
- Cutting: Oxyfuel II

Lesson 4-8

- A. Quality of Cutting
- B. Miscellaneous Uses of the Oxyfuel Gas Flames
- C. Oxyfuel Gas Welding
- Cutting: ARC

Lesson 4-9

- A. Air Carbon ARC Cutting (AAC)
- B. Carbon ARC Cutting (CAC)
- C. Oxygen ARC Cutting (OAC)
- D. Plasma ARC Cutting (PAC)
- E. Metal Arc Cutting (MAC)
- Welding: Special Applications and Techniques

Lesson 4-10

- A. Stud Welding
- B. Tube and Pipe Welding



- C. Field Erection of Pressure Vessels and Boilers
- D. Field-Welded Storage Tanks
- E. One-Sided Welding
- F. Underwater Welding and Cutting
- G. Weld Repair and Surfacing
- Welding: Design, Testing, and Inspection Lesson 4-11
  - A. The Design of Welded Joints
  - B. Testing
- Welding: Performance Qualifications Lesson 4-12
  - A. Codes and Specifications



# **SECTION I - MINIMUM QUALIFICATIONS**

Applicants shall meet the following minimum qualifications:

A. Age

All applicants shall be at least eighteen (18) years of age. Applicants are required to submit reliable proof of age.

# B. Education

There is an educational requirement of: High School Diploma or Equivalent Educational Attainment

# **SECTION II - APPLICATION PROCEDURES**

- A. Applications shall be accepted year-round, but at least once a month at the Local level by the Local Apprentice Representative. All persons requesting an application shall have one made available upon signing the applicant log.
- B. All applications shall be identical in form and requirements. The application form shall be numbered in sequence corresponding with the number appearing on the applicant log so that all applications can be accounted for. Columns will be provided on the applicant log to show race/ethnic and gender identification and the progress by dates and final disposition of each application.
- C. Before completing the application, each applicant will be required to read the Apprenticeship Standards and will be informed of the basic qualifications and documents needed to complete the application.
- D. Receipt of the properly completed application form, along with required supporting documents, (proof of age, birth certificate or other applicable documentation; copy of high school diploma, GED Certificate or other acceptable documentation) by the Western States Apprenticeship office shall constitute the completed application. Applications not returned within 60 days of the issue date will be considered invalid and the individual will have to reapply.
- E. The Area Apprenticeship office will review the applications received from applicants, checking for completeness and notifying applicant of accepted completed application. Applicants deficient in one or more qualifications or requirements or making false statements on their application will be notified in writing by the Area Apprenticeship office of their disqualification. The applicant will also be notified of what is required for application to be accepted.
- F. The Applicant Log will be forwarded to the Area Coordinator who will account for all applications received by logging it onto the Applicant Log.
- G. Duplicate copies of the original documents must be submitted as they will be kept by the Area Apprenticeship Committee.



# **SECTION III - SELECTION PROCEDURES**

- A. The Area Joint Apprenticeship Committee will utilize referrals from the Helmets to Hardhats Program. Applicants for up to twenty-five percent (25%) of the available openings of each apprenticeship class will first be sought using referrals from the Helmets to Hardhats Program. Veterans who meet the requirements for entry into the Helmets to Hardhats Program will be eligible for referral to the Area Joint Apprenticeship Committee upon verification from the Helmets to Hardhats Program that the veteran(s) has a transferable skill in an apprenticeable occupation. Referrals from the Helmets to Hardhats Program will be done pursuant to the procedures established by the Helmets to Hardhats Program. Supervision of the selection process shall be done by the Helmets to Hardhats Program. Entry of veterans into the Program will be done without regard to race, color, religion, national origin, sex (including pregnancy and gender identity), sexual orientation, age, genetic information, or disability.
- B. The Area Joint Apprenticeship Committee will utilize selection method #2 (Random Selection From Pool of Eligible Applicants).
- C. The random selection process shall be done electronically. The tracking software utilized by the apprenticeship program will randomly issue a draw number for each application based on the applicants' applicable group/pool.
- D. The place of the selection shall be open to all applicants and the public. The names of apprentices drawn by this method shall be posted immediately following the selection at the Area Joint Apprenticeship Committee's and Local Office place of business.
- E. The Area Coordinator will send the applicants a letter informing them of their placement on the Random Selection Applicant Roster.
- F. The Area Coordinator will provide the Local Committee with the final Applicant Roster based on the outcome of the random selection process.
- G. As openings for the registration of new apprentices occur, applicants will be notified of selection for indenturement by certified mail. It shall be the responsibility of the applicant to keep the Local Area Committee and Area Apprenticeship office informed of their current mailing address and phone number.
- H. If the applicant does not show up to the indenturement on the date and time indicated on the certified notice, the applicant's name will be removed from the list.
- I. Applicants will be physically capable of performing the essential functions of the apprenticeship program, with or without a reasonable accommodation, and without posing a direct threat to the health and safety of the individual or others.



- J. Applicants will pass a MOST Drug and Alcohol screening on acceptance into the program within forty-eight (48) hours after signing the apprenticeship agreement and prior to being employed. Applicants shall be subject to subsequent tests for drug/alcohol use on an annual, random, reasonable suspicion, and per cause basis thereafter. The MOST Drug and Alcohol screening and cut-off levels are set forth on both the BNAP and MOST websites.
- K. An applicant must have access to reliable transportation. For purposes of this requirement, the term reliable transportation shall mean any form of transportation that permits the apprentice to attend work and any required classroom instruction held in the geographic jurisdiction of the program.
- L. Qualified applicants remaining on a preceding eligibility pool will automatically be carried forward on the new eligibility pool and placed above those from the current pool of eligibles for a period of two (2) years unless the applicant has been removed from the list by their own written request or following failure to respond to an apprentice opening. Applicants who were not placed during the two (2) year period that were in the eligibility pool will be required to reapply.
- M. Alternative Selection Method If the applicant receives a Letter of Intent-To-Hire (Letter of Sponsorship, Letter of Subscription) from a signatory contractor.
  - a) A letter of Intent-To-Hire can be used as part of an "Alternative selection method"
  - b) The letter must be written, signed, and dated by a signatory employer and submitted to the JATC.



# **Appendix B**

# **ETA-671 APPRENTICESHIP AGREEMENT**

# **AND**

U.S. DEPARTMENT OF LABOR, OFFICE OF APPRENTICESHIP APPLICATION FOR CERTIFICATION OF COMPLETION OF APPRENTICESHIP

# Program Registration and Apprenticeship Agreement Office of Apprenticeship

# **U.S. Department of Labor** Employment and Training Administration

			APPRENTI	ICE REGI	STRAT	TION - SEC	CTION II	OMB No.	1205-022	23 Expires: 0	1/31/2020
Warning: This agreement d CFR, Part 5 for the employr assisted construction proje from the Office of App Apprenticeship Agency show	ment of the apects. Curren crenticeship wn below. (Ite	oprentice t certifica (OA) or em 24)	on Federally fi itions must be the recogniz	nanced o obtained zed State	Stand in the Oppo	dards incorp e selection ertunity Stan ement may b registration	orated as par and training dards in Title be terminated agency, in co	t of this Agreement of the apprent of the apprent of the part of the proposed with Ti	ent. The attice in a solution of the contraction of	sponsor will no accordance wit eccutive Order ng cause(s), wind R, Part 29	t discriminate th the Equal 11246. This
PART A: TO BE COMPLET	TED BY APPI	RENTICE	. NOTE TO SP	ONSOR:	PART	A SHOULE	ONLY BE F	FILLED OUT BY	/ APPRE	NTICE.	
1. Name (Last, First, Middle)	and Address	*So	cial Security Nu	ımber			oth A and B ( nitions on rev		5. Vet	eran Status (M	lark one)
						`		,	No	Non-Veteran	
(No., Street, City, State, Zi	p Code, Tele	ohone Nu	mber)			. Ethnic Gr lispanic or	oup (Mark or Latino	Vet	Veteran		
					_ N	lot Hispanio	c or Latino	6. Edi	ucation Level (	(Mark one)	
2. Date of Birth (Mo., Day, Y	r.)	3. Sex Mal	(Mark one) e Fem	aala	b. Race (Mark one or more)					8th grade or less	
		Iviai	e ren	iaie	Α	merican Inc	dian or Alaska		9th to 12th grade		
						sian lack or Afric	can Americar	•	GED		
							iian or other		High School Graduate or Greater		
						Pacific Islaı Vhite	nder		Pos	t Secondary o	r Technical
7a. Employment Status (Ma	rl. ono)	Now Er	malayaa	Cylotica					Tra	ining	
, ,	,		nployee	Existing	•	•	Task	sisal Tasinia a C	-11	M:::: \ / - +	
7b. Career Connection (Mar	, ,		,			renticeship		nical Training So		Military Vet	erans
Job Corps Yo	uthBuild	HUD/S	STEP-UP	Career	Cente	r Referral	Scho	ool-to-Registere	d Appren	ticesnip	
8. Signature of Apprentice			Date		9. Sig	nature of P	arent/Guardi	an (if minor)		Date	
PART B: SPONSOR: EXC	EPT FOR ITE	MS 6, 7,	8, 10a 10c, F	REMAIND	ER OF	ITEMS RE	POPULATEI	D FROM PROG	RAM RE	GISTRATION.	
Sponsor Program No.			, ,		1			rocesses listed		Occupation C	
								1. Interim Credentials ly applicable to Part B,			
					3b. and 3c. (Mark Yes						
						3. Occupation Training Approach (Mark one)  4. Term 5. Probationary Period (Hrs., Mos., Yrs.) (Hrs., Mos., Yrs.)					eriod
					•	,	(Hrs., Mos., Yrs	.) (Hrs	s., Mos., Yrs.)		
3a. Time-Based 3b. Competency-Based 3c. Hybrid											
						edit for Prevrience (Hrs.	vious ., Mos., Yrs.)	7. Term Rer (Hrs., Mos.,		8. Date Appr Begins	enticeship
9a. Related Instruction (Number of Hours Per Year)  9b. Apprentice Wages for Related Instruction Will Be Paid  9c. Related Training Instruction Source Will Be Paid											
10. Wages: (Instructions on	reverse)										
10a. Pre-Apprenticeship Hourly Wage \$ 10b. Apprentice's Entry Hourly Wage \$ 10c. Journeyworker's Hourly Wage \$											
Check Box	Period 1	2	3	4		5	6	7	8	9	10
10d. Term Hrs. Mos. or Yrs.											
10e. Wage Rate (Mark one) % or \$											
11. Signature of Sponsor's Representative(s)  Date Signed  13. Name and Address of Sponsor Designee to Receive Complaints (If applicable)						olaints					
12. Signature of Sponsor's F	Representative	e(s)	Date S	Signed							
PART C: TO BE COMPLETED BY REGISTRATION AGENCY											
Registration Agency and Address				2. Sign	ature (Regi	stration Ager	ncy)		3. Date Regi	stered	
4. Apprentice Identification N	lumber (Defin	ition on re	everse):		<u> </u>						

## **Program Definitions and/or Instructions:**

#### Part A

## Item 4.a. Definition - Ethnic Group:

**Hispanic or Latino.** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."

#### Item 4.b. Definitions - Race:

American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

**Asian.** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American. A person having origins in any of the Black racial groups of Africa. It includes people who indicate their race as "Black or African American," or report entries such as African American, Kenyan, Nigerian, or Haitian.

Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

#### Item 7b. Instructions:

Indicate any career connection (definitions follow). Enter "None" if no career connection applies.

**Pre-Apprenticeship.** A program or set of strategies designed to prepare individuals to enter and succeed in a Registered Apprenticeship program which has or have a documented partnership(s) with a Registered Apprenticeship program(s). **Technical Training School.** Graduates trained in an occupation from a technical training school related to an occupation registered by the program sponsor and who meet the minimum qualifications for Registered Apprenticeship.

**Military Veterans.** Veterans that completed a military technical training school and/or elect to participate in the Building and Construction Trades Helmets to Hardhats Program or trained in an occupation while in the military related to an occupation registered by the program sponsor and who meet the minimum qualifications for Registered Apprenticeship.

**Job Corps**. Graduates trained in an occupation from a federally funded Job Corps center related to an occupation registered by the program sponsor and who meet the minimum qualifications for Registered Apprenticeship.

**YouthBuild.** Graduates trained in an occupation from a federally funded YouthBuild program related to an occupation registered by the sponsor and who meet the minimum qualifications for Registered Apprenticeship.

**HUD/STEP-UP.** Applicants who successfully participated in the U.S. Department of Housing and Urban Development Step-Up program and received an apprenticeship experience which meets the minimum qualifications for Registered Apprenticeship. **Career Center Referral**. Includes career center participants referred to the Registered Apprenticeship Program and/or apprentice(s) that receive workforce system funded services that support their participation in a Registered Apprenticeship program. This may Include the use of individual training accounts and/or on-the-job training reimbursements.

**School-to-Registered Apprenticeship.** Program designed to allow high school youth ages 16 - 17 to enter a Registered Apprenticeship program and continue after graduation with full credit given for the high school portion.

## Part B

- **Item 2.b.1. Interim Credentials.** Based on program standards that utilize the competency-based or hybrid training approach, and, upon request of the program sponsor, the credentials are issued as certificates by the Registration Agency. Interim credentials provide certification of competency attainment by an apprentice.
- Item 3. Occupation Training Approach. The program sponsor decides which of the three training methods to use in the program as follows:
- 3.a. Time-Based Training Approach apprentice required to complete a specific number of hours of on-the-job learning (OJL) and related training instruction (RTI).
- 3.b. Competency-Based Training Approach apprentice required to demonstrate competency in defined subject areas and does not require any specific hours of OJL or RTI: or
- 3.c. Hybrid-Training Approach apprentice required to complete a minimum number of OJL and RTI hours and demonstrate competency in the defined subject areas.
- Item 4. Term (Hrs., Mos., Yrs.). Based on the program sponsor's training approach. See Part B, Item 4. Available in the terms of the Apprenticeship Standards.
- Item 5. Probationary Period (Hrs. Mos., Yrs.) Probation period cannot exceed 25 percent of the length of the program or one year, whichever is shorter.
- **Term Remaining (Hrs., Mos., Yrs.).** Under Part B, Item 6., Credit for Previous Experience (Hrs., Mos., Yrs.) is determined by the program sponsor. The Term Remaining (Hrs., Mos., Yrs.) in Part B, Item 7., for the apprentice to complete the apprenticeship is based on the training approach indicated in Part B, Item 3. The term remaining is available in the terms of the Apprenticeship Standards.

## Item 10. Wage Instructions:

- 10a. Pre-Apprentice hourly wage: sponsor enters the individual's hourly wage in the quarter prior to becoming an apprentice.
- 10b. Apprentice's entry hourly wage (hourly dollar amount paid): sponsor enters this apprentice's entry hourly wage.
- 10c. Journeyworker's wage: sponsor enters wage per hour.
- Term: sponsor enters in each box the apprentice schedule of pay for each advancement period based on the program sponsor's training approach. See Part B, Item 3., and is available in the terms of the Apprenticeship Standards.
- 10e. Percent or dollar amount: sponsor marks one.
- Note: 10c. If the employer is signatory to a collective bargaining agreement, the journeyworker's wage rate in the applicable collective bargaining agreement is identified. Apprenticeship program sponsors not covered by a collective bargaining agreement must identify a minimum journeyworker's hourly wage rate that will be the basis for the progressive wage schedule identified in Item 10e,of this agreement.
  - 10d. The employer agrees to pay the hourly wage rate identified in this section to the apprentice each period of the apprenticeship based on the successful completion of the training approach and related instruction outlined in the Apprenticeship Standards. The period may be expressed in hours, months, or years.
  - 10e. The wage rates are expressed either as a percent or in dollars and cents of the journeyworker's wage depending on the industry.



## Example (Time-based approach) - 3 YEAR APPRENTICESHIP PROGRAM

<u>Term</u>	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6
Hrs., Mos., Yrs.	1000 Hrs.					
%	55	60	65	70	80	90

## Example (Time-based approach) - 4 YEAR APPRENTICESHIP PROGRAM

<u>Term</u>	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8
Hrs., Mos., Yrs.	6 Mos.							
%	50	55	60	65	70	75	80	90

Item 13. Identifies the individual or entity responsible for receiving complaints (Code of Federal Regulations, CFR, Title 29 part 29.7(k)).

#### Part C

**Item 4. Definition:** The Registered Apprenticeship Partners Information Data System (RAPIDS) encrypts the apprentice's social security number and generates a unique identification number to identify the apprentice. It replaces the social security number to protect the apprentice's privacy.

\*The submission of your social security number is requested. The apprentice's social security number will only be used to verify the apprentice's periods of employment and wages for purposes of complying with the Office of Management and Budget related to common measures of the Federal job training and employment programs for measuring performance outcomes and for purposes of the Government Performance and Results Act. The Office of Apprenticeship will use wage records through the Wage Record Interchange System and needs the apprentice's social security number to match this number against the employers' wage records. Also, the apprentice's social security number will be used, if appropriate, for purposes of the Davis Bacon Act of 1931, as amended, U.S. Code Title 40, Sections 276a to 276a-7, and Title 29 CFR 5, to verify and certify to the U.S. Department of Labor, Wage and Hour Division, that you are a registered apprentice to ensure that the employer is complying with the geographic prevailing wage of your occupational classification. Failure to disclose your social security number on this form will not affect your right to be registered as an apprentice. Civil and criminal provisions of the Privacy Act apply to any unlawful disclosure of your social security number, which is prohibited.

The collection and maintenance of the data on ETA-671, Apprentice Registration – Section II Form, is authorized under the National Apprenticeship Act, 29 U.S.C. 50, and CFR 29 Part 29.1. The data is used for apprenticeship program statistical purposes and is maintained, pursuant to the Privacy Act of 1974 (5 U.S.C. 552a.), in a system of records entitled, DOL/ETA-4, Registered Apprenticeship Partners Information Management Data System (RAPIDS) at the U.S. Department of Labor, Office of Apprenticeship. Data may be disclosed to a State Apprenticeship Agency to determine an assessment of skill needs and program information, and in connection with federal litigation or when required by

Persons are not required to respond to this collection of information unless it displays a currently valid OMB control number. Public reporting burden for this collection of information is estimated to average five minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond is required to obtain or retain benefits under 29 USC 50. Send comments regarding this burden or any other aspect of this collection of information including suggestions for reducing this burden to the U.S. Department of Labor, Office of Apprenticeship, 200 Constitution Avenue, N.W., Room N-5311, Washington, D.C. 20210 (Paperwork Reduction Project 1205-0023.)

# U.S. DEPARTMENT OF LABOR OFFICE OF APPRENTICESHIP

APPLICATION FOR CERTIFICATION OF COMPLETION OF APPRENTICESHIP (If Required please type or print all information, attach additional apprentices on separate sheet) (This Application is optional, for Sponsor utilizing Electronic Registration)

NONCOR	Information	
.31101115011		а.
OPOLIOUI A		

Sponsor:	Program #:				
Address:	Contact Name:				
City, State, Zip:	Phone:				
Apprentice Information					
Full Name of					
Apprentice:					
Apprentice					
Registration					
Number:					
Occupation:					
Term:					
Registration Date:					
Date of Completion:					
Completion Wage:					
Related Instruction Certification					
Related Instruction Hours completed:					
Related Instruction Furnished By:					
Teacher(s) or Director(s) of Related Instruction Certifying to above information:					
Name: Address:					
radics.					
Request for Certificate					
On behalf of the above-named sponsor, I hereb	y certify that the apprentice named in the				
application has satisfactorily completed and is					
his/her apprenticeship program as registered w	ith the Office of Apprenticeship and hereby				
recommend the issuance of the <b>Certificate of Co</b>	mpletion of Apprenticeship				
	<b>5</b> .				
Sponsor's Signature:	Date:				
Title:					
Office of Apprentice use only:					
Date Entered in RAPIDS (if required):					
Date Certificate Sent:					

APPLICATION FOR CERTIFICATION OF COMPLETION OF APPRENTICESHIP
(If Required please type or print all information, attach additional apprentices on separate sheet)
(This Application is optional, for Sponsor utilizing Electronic Registration)

# <u>Authentication of Requests for Certificate of Completion of Apprenticeship</u>

Where the Office of Apprenticeship is the Registration Agency, issuance of a Certificate of Completion of Apprenticeship to apprentices upon satisfactory completion of the requirements of the apprenticeship program as established in these Standards, the sponsor certifies to the Registration Agency and requests the awarding of a Certificate of Completion of Apprenticeship to the completing apprentice(s). Such requests are completed either electronically using the Registered Apprenticeship Partner Information System (RAPIDS) or in writing using this form from the sponsor to the appropriate field office.

## **General Guidance**

The sponsor will verify that the apprentice has completed all requirements of apprenticeship including a signed copy of transcripts from the sponsor, provider or sponsor of the related instruction. The field office representative shall have in evidence an electronic or written Application for Certification of Completion of Apprenticeship.

When a large number of apprentices are completing at the same time from the same occupation, one application form from the sponsor can be used with an attached list of pertinent information for the completing apprentices. When the sponsor has more than one occupation or more than one employer, the sponsor should complete separate forms for each occupation and employer, following the procedure above.

The occupation identified, must be the occupation title as listed in the most current List of Officially Recognized Apprenticeable Occupations. For sponsors who use a slightly different occupational title, OA staff may use the sponsor's title as long as the officially recognized occupational title is included in parenthesis under the sponsor's occupational title. Please see attached "sample" for reference.

The term "journeyman, journeyworker, journeyperson, etc." should not be included in the occupational title. These terms are used to describe a level of competency rather than an occupational title.

In rare instances where a program sponsor may utilize such a term above in their occupational title and that terminology is consistently used within their organization and training materials, OA staff may use that terminology on the sponsor's occupational title as long as the officially recognized occupational title is listed in parenthesis under the sponsor's title. The practice of using a level of competency in the occupational title should be discouraged when possible.

The sponsor's name on the Certificate of Completion of Apprenticeship shall be as it is registered and approved in their apprenticeship standards.

The date completed shall be the date of completion as indicated on the request form.

## <u>Issuance of Replacement OA Certificate of Completion of Apprenticeship</u>

Replacement certificate requests shall be verified with undeniable proof that an original certificate was either issued or requested by the sponsor. This shall be verified through OA's records or the program sponsor's records. In the event a field office has no proof, yet a program sponsor does, or vice versa, a copy of that proof shall be sent to the field office and included in the program folder. The term "**Replacement Certificate**" shall be printed in 12 pt. font size on the replacement certificate in the space centered between the last line of type and the U.S. Department of Labor seal.

The Certificate of Completion of Apprenticeship shall not be used for any other purpose than completion of a Registered Apprenticeship program.