



Standards of Apprenticeship

2019 Associated Builders and Contractors GNJ

## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER NORTHERN DIVISION**

**Occupation: Operating Engineer  
O-NET Code: 47-2073.00 RAPIDS Code: 0365  
Time-Based Apprenticeship Program**

- ✓ **Similar Program Notice Letters**
- ✓ **Form 5910 – Application for Approval On-the-Job Training & Apprenticeship**
- ✓ **U.S. Department of Labor Apprenticeable Occupation List ONET Code Confirmation**
- ✓ **Attachment 3, 4, 5 Checklist**
- ✓ **Attachment 3 – Program Description**
- ✓ **Attachment 4 – Work Process Schedule**
- ✓ **Attachment 5 – Related Technical Instruction**





January 10, 2020

Brian Prather  
Operating Engineers Local 3 JATC  
1290 Corporate Blvd  
Reno, NV 89502

Dear Brian,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern and Southern Division Apprenticeship Trust at its meeting on February 13, 2020.

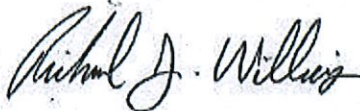
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Attached you will find the standards and accompanying appendices for the proposed occupation. The State Apprenticeship Council will welcome any comments you may have.

Thank you.

Sincerely,



Richard J. Williams

State Apprenticeship Director



January 10, 2020

Larry Hopkins  
Southern Nevada Operating Engineers Local 12 JATC  
6350 Howdy Wells Avenue  
Las Vegas, NV 89515

Dear Larry,

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In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

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Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director







STATE OF NEVADA  
Office of the Labor Commissioner  
Nevada State Apprenticeship Council

APPLICATION FOR APPROVAL  
ON THE JOB TRAINING & APPRENTICE

Program Name ABC Nevada Chapter Northern Division Apprenticeship Trust Fund Program # \_\_\_\_\_

Address 240 South Rock Blvd. #121 City Reno State NV Telephone 702.227.0536

Contact Person Kara Arenas Title Vice President Type of Program: Construction Sic Code: \_\_\_\_\_

Type of Action: (Check One) A. <input type="checkbox"/> Wage Increase B. <input type="checkbox"/> Revision of Standards C. <input checked="" type="checkbox"/> New Occupation	Type of Program: (Check One) A. <input type="checkbox"/> Individual Union B. <input type="checkbox"/> Individual Non Union C. <input type="checkbox"/> Group Union D. <input checked="" type="checkbox"/> Group Non Union E. <input type="checkbox"/> If Union Bargaining Unit	Journey Workers (JW) A. No. of Females <u>1</u> B. No. of Minorities <u>10</u> C. No. JW <u>48</u> D. No. of Employers <u>3</u>	Pay Period <input checked="" type="checkbox"/> Weekly <input type="checkbox"/> Bi-Weekly <input type="checkbox"/> Semi Monthly Pay Increases (Months) <input type="checkbox"/> 3 <input type="checkbox"/> 6 <input type="checkbox"/> 12 <input checked="" type="checkbox"/> Other (every 1,000 hours)
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TRADE INFORMATION

Occupation	Term (OJT hours)	RTI (Classroom hours)	# Of Journey workers	# Of Apprentices In Training	Journey worker Hourly Rate	Days per Week
Operator Apprentice	6,000	432	48	0	\$ 30.00	5

HOURLY APPRENTICE WAGE AND FRINGE BY PERIOD

Occupation	1 <sup>ST</sup> 50%	2 <sup>ND</sup> 55%	3 <sup>RD</sup> 60%	4 <sup>TH</sup> 65%	5 <sup>TH</sup> 70%	6 <sup>TH</sup> 75%			
Operator Apprentice	\$ 15.00	\$ 16.50	\$ 18.00	\$ 19.50	\$ 21.00	\$ 22.50			
Operator Apprentice Fringe Per CFR 29 5.6	1 <sup>ST</sup> 50%	2 <sup>ND</sup> 55%	3 <sup>RD</sup> 60%	4 <sup>TH</sup> 65%	5 <sup>TH</sup> 70%	6 <sup>TH</sup> 75%			

Instructor	Occupation	Experience (Years)
TBD		
TBD		
TBD		

10.29.19  
Date

Kara Arenas  
Signature of Program Coordinator

DO NOT WRITE BELOW THIS LINE

Approved: \_\_\_\_\_

Disapproved: \_\_\_\_\_

Secretary Director of Apprenticeship

Date



## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER NORTHERN DIVISION**

**Occupation – Operating Engineer  
O-NET Code: 47-2073.00 RAPIDS Code: 0365  
Time-Based Apprenticeship Program**

U.S. Department of Labor Apprenticeable Occupation List:

OPERATING ENGINEER (Alternate Title: Heavy Construction Equipment Mechanic)	0365	<a href="#">47-2073.00</a>	6000	TB
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Link to list: <https://www.doleta.gov/oa/occupations.cfm>





**2019 ABC GNJ Standards of Apprenticeship**  
**Attachment Checklist**  
**Operating Engineer, Time-Based**

Standards Placement	29 CFR, NRS 610, and NAC 610 Required Provisions
Attachment 3	<p>2) <b>Term:</b> A term of apprenticeship of not less than 2,000 hours of work experience, consistent with training requirements as established by practice in the trade. <b>NRS 610.144 3 (b)</b></p> <p><b>Type of Occupation:</b> The term of apprenticeship, which for an individual apprentice may be measured either through the completion of the industry standard for on-the-job learning (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach). <b>29 CFR 29.5 (b)</b></p>
Attachment 4	<p>3) <b>Work Processes:</b> An outline of the processes in which the apprentice will receive supervised experience and training on the job, and the allocation of the approximate time to be spent in each major process. <b>NRS 610.144 3 (c)</b></p>
Attachment 5	<p>4) <b>Related Instruction:</b> Provisions for organized, related and supplemental instruction in technical subjects (and the costs thereof) related to the trade with a minimum of 144 hours for each year of apprenticeship, given in a classroom or through trade, industrial or correspondence courses of equivalent value or other forms of study approved by the State Apprenticeship Council. <b>NRS 610.144 3 (d); NAC 610.433</b></p>
5910 Form	<p>5) <b>Wages:</b> A progressively increasing, reasonable and profitable schedule of wages to be paid to the apprentice consistent with the skills acquired, not less than that allowed by federal or state law or regulations or by a collective bargaining agreement. Employers shall pay a beginning wage for apprentices which is at least 35 percent of the rate for journeymen in the same trade, or Minimum and Reasonable and profitable wage for apprentice in construction industry. <b>NRS 610.144 3 (e); NAC 610.480, NAC 610.485</b></p>
Attachment 3	<p>6) <b>Ratio:</b> A numeric ratio of apprentices to journeymen consistent with proper supervision, training, safety, continuity of employment and applicable provisions in collective bargaining agreements, in language that is specific and clear as to its application in terms of job sites, workforces, departments or plants. <b>NRS 610.144 3 (g)</b></p>
	<p align="center"><b>ALL DOCUMENTS HAVE BEEN CHECKED FOR SPELLING, FORMATTING, GRAMMAR, (INCLUDING TABLE OF CONTENTS), ETC.</b></p>





## **Attachment 3 –Apprentice Operator Program Description**

### **ABC Nevada Apprentice Operator:**

Apprentice Operators are taught to operate heavy equipment of many types of heavy equipment including earth moving equipment such as dozers, scrapers, compactors, backhoes, motor graders, cranes etc.

The Apprentice Operators will complete a total of 6,000 on the job training hours.

Apprentice Operators will also complete a minimum of 432 hours of classroom instruction.

The probationary period for the Apprentice Operators Program will be 1,500 on the job training hours.

To provide for a steady supply of trained persons into the construction industry and to reflect employment opportunities, apprentice to journeyperson ratios will be enacted in accordance with the following provisions. One Apprentice Operator may be trained for the first Journeyperson Operator employed, with a ratio of one Apprentice Operator for every five Journeyperson Operators thereafter. The ratio is per job site and not to exceed the employers overall workforce.

Our registered apprentices will graduate our program with the fundamental skills and knowledge needed to operate the following types of heavy equipment.

## Attachment 4- Apprentice Operator Work Processes

If an Apprentice Operator learns to operate five major pieces of equipment proficiently, they shall be considered diversified and eligible to complete the program when they have accumulated 6,000 on-the-job training hours.

### Suggested Hours

#### **Bulldozer** 1,000

- (a) Learn the different types of work assigned the dozer from pioneer and rough excavation to finish work, including GPS.
- (b) Learn to make minor adjustments and repairs and work with Heavy Duty Repair Mechanic and/or welder on major repairs.

#### **Motor Patrol** 1,000

- (a) Learn to service, maintain and adjust the machine.
- (b) Learn to different types of work the machine does, such as fine grading, back sloping, mixing and laying oil, including GPS.
- (c) Learn to make adjustment and minor repairs with Heavy Duty Repair Mechanic and/or welder on major repairs.

#### **Scrapers, Self-Propelled** 1,000

- (a) Learn to operate the various types of motor and motor-electric driven machines, including GPS.
- (b) Learn to service, maintain and repair the different makes of machines.

#### **Bucket-Type Equipment, Shovel, Backhoe and Other Bucket Type** 1,000

- (a) Learn the names and uses of various types of draglines, buckets and attachments.
- (b) Learn care, preventive maintenance, proper oil and greases, cables, and minor adjustments.
- (c) Learn to change teeth, cables, adjust frictions, brakes and clutches.
- (d) Learn the controls, their importance in proper operation and movement of the machine for safety of other employees and equipment working near machine.
- (e) Learn to read and set grades stakes, also to read plans and instructions.
- (f) Learn to make major overhauls working with Operator, Heavy Duty Repair Mechanic and/or welder.
- (g) Grades Stakes and Plan Reading.
- (h) Learn the names and uses of various types of shovels, buckets, cables and attachments.
- (i) Learn care, preventive maintenance, proper oils and greases, cables and minor adjustments.
- (j) Learn to change teeth and cables and adjust frictions, brakes and clutches.
- (k) Learn the controls their importance in proper operation and movement of machine for safety of other employees and equipment working near machine.
- (l) Learn to read and set grades stakes, also to read prints and instructions.
- (m) Learn to make major overhauls working with the Operator, heavy Duty Repair Mechanic and/ or welder.

#### **Grade Checking** 1,000

- (a) Learn proper use of hand instruments and to read plans for making grades.
- (b) Learn proper use of GPS equipment (Rover) or similar.



<b>Crawler and Truck Type Cranes, Derricks, Bridges, Towers &amp; Gantry Cranes</b>	<b>500</b>
(a) Learn care, preventative maintenance, proper oils, grease, cables and minor adjustments. (b) Learn the controls, their importance in the proper operation and movements of the machine for the safety of other employees and equipment working near the machine. (c) Learn to make major overhauls working with Operator, Heavy Duty Repair Mechanic and/or welder. (d) Learn to proper load the machine and cables will safety handle. (e) Learn the operating difference between a live boom and regular operation (f) Learn to give and receive proper signals for hoisting, swinging and lowering materials and equipment. (g) Learn to use out-riggers on wheel-type machines for protection of the machine and materials being handled. (h) Learn to understand proper horn and hand signals when assigned to mobile cranes.	
<b>Concrete and Asphalt, Spreaders, Tampers and Finishers</b>	<b>500</b>
(a) Learn to service, make minor repairs, adjust and be able to operate the machine	
<b>Maintenance-Cutting and Welding-Grease and Oils</b>	<b>500</b>
(a) Learn minor repairs and adjustment. (b) Learn Minor welding repair and cutting. (c) Learn the types of greases and oils and their uses.	
<b>Roller – Flat Wheel, Sheep Foot and Pneumatic</b>	<b>400</b>
(a) Learn the purpose of the different rollers, the different procedures for compaction of various materials, remote control and the operation for care off different types of rollers.	
<b>Tractor-Type skip Loaders</b>	<b>400</b>
(a) Learn to operate the various types, service and make minor repair and adjustments.	
<b>Wheel-Type Tractors, Including Fork Lifts, Lumber carriers, High Lifts, etc.</b>	<b>400</b>
(a) Learn to service, maintain, and make minor repairs and adjustments.	
<b>Trenching Machine</b>	<b>400</b>
(a) Learn to operate the various types and sizes of machines, their maintenance and repair. (b) Grades Stakes and Plan Reading.	
<b>Air Compressors-Pumps of all Types and Miscellaneous Equipment</b>	<b>100</b>
(a) Learn the proper servicing and adjustments for proper operation of the machine.	

**TOTAL HOURS 6,000**

## **Attachment 5- Apprentice Operator Related Training Instruction**

### **Level 1: Minimum of 144 Hours**

Orientation to the Trade  
Heavy Equipment Safety  
Identification of Heavy Equipment  
Basic Operational Techniques  
Utility Tractors  
Introduction to Earthmoving  
Grades

### **Level 2: Minimum of 144 Hours**

Rough Terrain Forklifts  
On-Road Dump Trucks  
Excavation Math  
Interpreting Civil Drawings  
Site Work  
Soils  
Skid Steers  
Loaders  
Scrapers

### **Level 3: Minimum of 144 Hours**

Finishing and Grading  
Compaction Equipment  
Backhoes  
Off-Road Dump Trucks  
Dozers  
Excavators  
Motor Graders



Standards of Apprenticeship

2019 Associated Builders and Contractors GNJ

## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER SOUTHERN DIVISION**

**Occupation: Operating Engineer  
O-NET Code: 47-2073.00 RAPIDS Code: 0365  
Time-Based Apprenticeship Program**

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Operating Engineers Local 3 JATC  
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Reno, NV 89502

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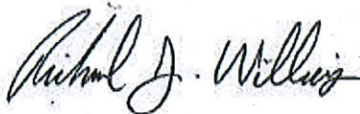
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Richard J. Williams

State Apprenticeship Director



January 10, 2020

Larry Hopkins  
Southern Nevada Operating Engineers Local 12 JATC  
6350 Howdy Wells Avenue  
Las Vegas, NV 89515

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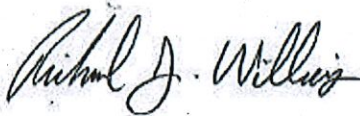
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Richard J. Williams  
State Apprenticeship Director





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SEAN W. McDONALD ADMITTED IN NV & WA  
PAUL D. COLESON ADMITTED IN NV

# THE URBAN LAW FIRM

A PROFESSIONAL CORPORATION

FILE NO.:  
568.0007

January 31, 2020

**Via Email and U.S. Mail**

Nevada State Apprenticeship Council  
Governor's Office of Workforce Innovation  
Attn: Richard Williams, State Director of Apprenticeship  
Grant Sawyer Building  
555 E. Washington Ave., #4900  
Las Vegas, NV 89101  
[REDACTED]

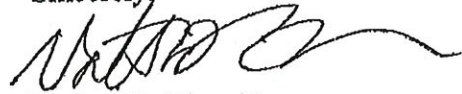
**Re: Objections of International Union of Operating Engineers Local 12 Journeyman  
and Apprentice Training Committee to Application for Apprenticeship  
Standards - Operator Engineer Apprentice - ABC Nevada, Associated Builders  
and Contractors, Southern Division Apprenticeship Trust  
Hearing Date: Thursday, February 13, 2020 (9:00 a.m.)**

Dear Mr. Williams,

Enclosed with this letter please find the Objections of the International Union of Operating Engineers Local 12 Journeyman and Apprentice Training Committee ("OE12 JATC") to the Application for Apprenticeship Standards for an "Operator Engineer Apprentice" filed by ABC Nevada, Associated Builders and Contractors, Southern Division Apprenticeship Trust for consideration by the Nevada State Apprenticeship Council at the Hearing scheduled for Thursday, February 13, 2020 at 9:00 a.m.

I have been retained to represent the OE12 JATC at the hearing of this matter on February 13, 2020. I will be present at the February 13, 2020 Council meeting along with a representative of the OE12 JATC. If you have any questions, please do not hesitate to contact me directly.

Sincerely,



Nathan R. Ring, Esq.

cc: Client

**BEFORE THE  
NEVADA STATE APPRENTICESHIP COUNCIL**

In the Matter of the:

Application for Apprenticeship Standards –  
Operator Engineer Apprentice - ABC Nevada,  
Associated Builders and Contractors, Southern  
Division Apprenticeship Trust

Applicant.

Hearing Date: February 13, 2020

Hearing Time: 9:00 a.m.

**Objections to Standards and Request for Denial  
Filed by  
International Union of Operating Engineers Local 12  
Journeyman and Apprentice Training Committee**

**I. STATEMENT OF FACTS AND PRIOR PROCEEDINGS**

On November 15, 2019, the Southern Nevada Operating Engineers Local 12 Journeyman and Apprentice Training Committee ("OE12 JATC") received a copy of an Application for Apprenticeship Standards ("Application") for an Operator Engineer Apprentice ("Operator Apprentice") submitted to the Nevada State Apprenticeship Council ("Council") by ABC Nevada, Associated Builders and Contractors, Southern Division Apprenticeship Trust ("ABC Trust"). The Application is a request for approval of a "parallel" training program, which would allegedly be located in Southern Nevada. The Application contains Standards, which would be parallel to the Council's approved standards registered by the OE12 JATC. OE12 JATC is an interested party to the Application.

The Application initially came before the Council for review at the December 16, 2019 Council meeting. The Application was reset for hearing at the February 13, 2020 meeting due to a concern over the Open Meeting Law. The OE12 JATC takes this opportunity to resubmit and further revise its objections to the Application by the ABC for its parallel program.

It is the duty of the Nevada State Apprenticeship Council to "[e]stablish standards for programs and agreements that are not lower than those prescribed by this chapter." NRS 610.090(1). Therefore, when a program's standards do not meet the standards set under Chapter 610 of NRS and the regulations adopted thereunder, the Council has a duty to deny approval of the non-conforming program.

Equally as important as the duties of the Council are the duties of the program applying for approval of its standards. It is the program's duty to "submit the standards in their entirety." NAC 610.314.



## II. OBJECTIONS TO ABC APPLICATION STANDARDS

The ABC Standards must be denied by the Council because the ABC Standards are not in compliance with Chapter 610 of the Nevada Revised Statutes and Chapter 610 of the Nevada Administrative Code. The Application is out of compliance with these governing laws for seven distinct and wholly separate reasons. Each of those seven reasons will be addressed separately.

### 1. The ABC Committee Does Not Conform with the Statute.

The ABC Application Standards do not include a Committee composed of an "*equal number of representatives of management and labor*" as required by NAC 610.225(2) (emphasis added). The purpose of requiring equal representation is to "ensure meaningful and trustworthy representation of employees and apprentices in the management of the program." NRS 610.146.

Section II(B)(1) of the ABC Standards state "the Committee shall be composed of Apprenticeship sponsor companies to represent the membership of the Association selected by his or her fellow employees to represent the apprentices." As it is written, this sentence is non-sensical. It is difficult to even interpret what the sentence is trying to say. The Standards do not provide for an equal number of representatives. Furthermore, the ABC Standards do not provide for a process of appointment of representatives of the employees and apprentices in the management of the program, which is required by NRS 610.146.

Section II(C)(2) of the ABC Application Standards state that "A quorum at meeting shall consist of at least one (1) member representing the employers and one (1) member representing the employees, selected by the group they are representing." On its face, there is no issue with this quorum requirement because it provides for equal representation at meetings. But the issue is the Standards do not provide a process for how employee representatives will be appointed. Without a provision for appointment of employee representatives, the quorum of any meetings is completely irrelevant.

The Council must require this Applicant to delete or revise its inconsistent language in its Standards. The revisions must conform with the requirements of Chapter 610 of NRS. The Standards must clearly and unequivocally provide for an equal number of employee representatives, selected by the employees and apprentices. The Standards must also clearly provide for how the employee representatives will be appointed. In the form in which they were submitted to the Council, the ABC Standards cannot be approved.

### 2. The ABC Standards Do Not Provide Sufficient Background and Experience of Their Program's Qualified Instructors.

The ABC Standards merely provide for two instructors the ABC claims are qualified to instruct Operator Engineer apprentices. Their claim of qualification is merely a certification from NCCER. The fact that someone has received a certification does not prove they are a qualified instructor under NRS Chapter 610.



NRS 610.110(2)(d)(2) requires the State Apprenticeship Director to assess the adequacy of “the protection of the public interest as related to the subject fields.” Nevada law also requires “related and supplemental instruction for apprentices, coordination of instruction with job experiences, and...selection and training of teachers...for that instruction [which is]...the responsibility of the local joint apprenticeship committees.” NRS 610.120(2). Nevada law further requires that Standards include “provisions for adequate and safe equipment and facilities for training...of apprentices in safety...in related instruction” and “assurance of qualified training personnel.” NRS 610.144(3)(i)-(n).

ABC’s Standards do not provide any background or real-world experience whatsoever of their instructors. Those persons teaching Apprentices must be qualified instructors and a simple claim of third party certification is insufficient to prove requisite experience for that instruction. The concern with not having qualified instructors is important in any apprenticeship program but the concern is more important here because of the dangerous work performed by those in this occupation.

ABC’s Standards do not provide proof of its Program having qualified instructors. Without this proof, the Council is being asked to blindly authorize a training environment without appropriate protections for the apprentices and the public. ABC must revise this specific standard to appropriately and fully provide for qualified and experienced instructors. For this reason, in the form in which they were submitted, the ABC Standards should not be approved.

### 3. The ABC Standards Do Not Provide a Training Facility.

In its purpose section, NRS 610.020 includes the establishment of “an organized program for...training of persons under approved standards for apprenticeship, *providing facilities for their training* and guidance in the arts and crafts of industry and trade, with instruction in related and supplementary education.” NRS 610.020 (emphasis added). Thus, within the explicitly stated legislative purpose of Nevada’s apprenticeship laws is a requirement for providing facilities for training

The ABC Standards do not provide any commitment on the Program’s part to provide a training facility for the training of apprentices. Existing approved parallel programs in this state include specific training sites and specific equipment that will be used to provide competent training to apprentices. The ABC Standards are silent on the site or location of the training facility and the equipment that will be used to train the Program’s registered apprentices. The ABC Standards do not provide any information to show financial capacity, investment or contribution of funds, facilities and equipment that is required to properly train apprentices. The ABC Standards lack a training facility, which requires the Council to reject the ABC Standards as submitted.

### 4. The Standards Violate the Guarantee on Payment of Program Costs

NRS 610.170 requires program sponsors, like the ABC here, to “use its best endeavors to procure...training for the apprentice” and requires the program to “accept full



responsibility...for...training.” Expounding upon this requirement, this Council adopted NAC 610.433, which provides that “a program must pay the costs of training an apprentice.” The ABC Standards do not provide the Council with an explanation of who will be responsible for the costs of the program. For this reason, the ABC Standards do not meet the requirements of Nevada law and should be denied.

5. Wages in the ABC Standards Do Not Conform With Nevada Law.

The ABC Standards do not include a commitment to abide by the prevailing wage requirements for apprentices under Nevada law. In particular, SB207 passed by the Nevada Legislature in 2019 requires a certain percentage of apprentice hours to be worked on certain public works projects. Work of an Operator Engineer apprentice will be “horizontal construction” as defined in SB 207. This means apprentices must be paid the required prevailing wage rate for their work on public works’ projects. The Labor Commissioner’s Operating Engineer wage rate is between \$73.59 and \$78.44 per hour. The ABC Standards provide for a \$30.00 per hour journeyman rate and assume a 50-75% legitimate fringe benefit, which is referenced in the 5910 Form. The rates proposed in the ABC Standards do not satisfy the requirements of SB207 and Nevada’s prevailing wage laws. Based upon this non-conforming standard, the Council must reject the ABC Standards.

6. The ABC Standards Do Not Provide Department of Education Approval of Their Classroom Training Curriculum and Do Not Provide Details of its Classes Offered.

NRS 610.144(3)(d) requires program standards to contain provisions for “organized, related and supplemental instruction in technical subjects related to the trade with a minimum of 144 hours for each year of apprenticeship, given in a classroom or...courses of equivalent value or other forms of study approved by the Council.” In attachment 5, the ABC Standards reference Apprentice Operator Related Training Instruction. This includes a list of 23 courses without any detail on the class or any specifications of the competency-based instruction for the 23 courses.

In the past, when considering approval of program standards, the Council has required a review and approval of curriculum for course instruction proposed by any new program. The ABC Standards do not contain a competent description of its classroom instruction. When approving previous programs, the Nevada Department of Education, through a designated curriculum professional, has approved course and classroom curriculum. The submitted ABC Standards do not contain approved course curriculum, and the Council should reject the ABC Standards.

7. Inadequate Apprentice to Journeyman Ratio.

Nevada law requires the Council to ensure the ratio of apprentices to journeymen is consistent with proper supervision, training, and safety. NRS 610.144(3)(g). The Council’s own regulations specifically spell out the appropriate ratio of apprentices to journeymen. The

Council's regulations state all "construction industry" programs must use a jobsite ratio of "not more than one apprentice for the first journeyman at the jobsite and not more than one apprentice for every three additional journeymen." NAC 610.438(1)(a).

Section XV(A) of the ABC Standards merely define their ratio as not "greater than the ratio approved for the employer as to the entire work force." Thus, if a participating employer under the ABC program employs a work force of equal number of apprentices and journeyman, the ABC Standards, if approved, allow the Program to avoid the jobsite specific requirements of Nevada law. Violating the jobsite specific requirements of NAC 610.438(1)(a) will expose apprentices and the public to unsafe conditions.

The ABC Standards are permitted to vary from the construction industry ratio laid out in NAC 610.438(1)(a) if they provide evidence demonstrating a "different ratio is consistent with the proper supervision, training, safety and continuity of employment of an apprentice". The ABC Standards do not provide evidence to demonstrate this to be true.

Without a jobsite specific ratio that conforms to the regulations previously adopted by the Council and without evidence that a different ratio will ensure proper supervision, training, and safety, the ABC Standards must be denied by the Council.

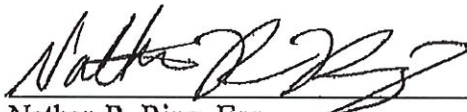
### **III. AGGRIEVED PARTY STATUS**

OE12 JATC and its approved apprenticeship standards would be injured if the ABC Standards for the "Operator Engineer Apprentice" are approved. Because it files these objections and have an approved "parallel program" receiving notice from the Council, OE12 JATC requests that the Council deem OE12 JATC as a potential "aggrieved party."

### **IV. CONCLUSION**

Based upon the arguments above and Nevada law governing this matter, OE12 JATC requests the Council deny approval of the ABC Standards for its Operator Engineer program (Southern Nevada). The Standards, as submitted, are incomplete and do not meet the requirements of Nevada law. The OE12 JATC further requests it be recognized as an "aggrieved party".

Respectfully submitted,



Nathan R. Ring, Esq.  
The Urban Law Firm  
Counsel for OE12 JATC





STATE OF NEVADA  
Office of the Labor Commissioner  
Nevada State Apprenticeship Council

APPLICATION FOR APPROVAL  
ON THE JOB TRAINING & APPRENTICE

Program Name ABC Nevada Chapter Southern Division Apprenticeship Trust Fund Program # \_\_\_\_\_

Address 5070 Arville St. #4 City Las Vegas State NV Telephone 702.227.0536

Contact Person Kara Arenas Title Vice President Type of Program: Construction Sic Code: \_\_\_\_\_

Type of Action: (Check One) A. <input type="checkbox"/> Wage Increase B. <input type="checkbox"/> Revision of Standards C. <input checked="" type="checkbox"/> New Occupation	Type of Program: (Check One) A. <input type="checkbox"/> Individual Union B. <input type="checkbox"/> Individual Non Union C. <input type="checkbox"/> Group Union D. <input checked="" type="checkbox"/> Group Non Union E. <input type="checkbox"/> If Union Bargaining Unit	Journey Workers (JW) A. No. of Females <u>2</u> B. No. of Minorities <u>48</u> C. No. JW <u>148</u> D. No. of Employers <u>7</u>	Pay Period <input checked="" type="checkbox"/> Weekly <input type="checkbox"/> Bi-Weekly <input type="checkbox"/> Semi Monthly Pay Increases (Months) <input type="checkbox"/> 3 <input type="checkbox"/> 6 <input type="checkbox"/> 12 <input checked="" type="checkbox"/> Other (every 1,000 hours)
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TRADE INFORMATION

Occupation	Term (OJT hours)	RTI (Classroom hours)	# Of Journey workers	# Of Apprentices In Training	Journey worker Hourly Rate	Days per Week
Operator Apprentice	6,000	432	148	0	\$ 30.00	5

HOURLY APPRENTICE WAGE AND FRINGE BY PERIOD

Occupation	1 <sup>ST</sup> 50%	2 <sup>ND</sup> 55%	3 <sup>RD</sup> 60%	4 <sup>TH</sup> 65%	5 <sup>TH</sup> 70%	6 <sup>TH</sup> 75%				
Operator Apprentice	\$ 15.00	\$ 16.50	\$ 18.00	\$ 19.50	\$ 21.00	\$ 22.50				
Operator Apprentice Fringe Per CFR 29 5.5	1 <sup>ST</sup> 50%	2 <sup>ND</sup> 55%	3 <sup>RD</sup> 60%	4 <sup>TH</sup> 65%	5 <sup>TH</sup> 70%	6 <sup>TH</sup> 75%				

Instructor	Occupation	Experience (Years)
TBD		
TBD		
TBD		

10.29.19  
Date

Kara Arenas  
Signature of Program Coordinator

DO NOT WRITE BELOW THIS LINE

Approved:

Disapproved: \_\_\_\_\_

Secretary Director of Apprenticeship

Date



## ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER SOUTHERN DIVISION

**Occupation – Operating Engineer**  
**O-NET Code: 47-2073.00 RAPIDS Code: 0365**  
**Time-Based Apprenticeship Program**

U.S. Department of Labor Apprenticeable Occupation List:

OPERATING ENGINEER (Alternate Title: Heavy Construction Equipment Mechanic)	0365	<a href="#">47-2073.00</a>	6000	TB
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Link to list: <https://www.doleta.gov/oa/occupations.cfm>





**2019 ABC GNJ Standards of Apprenticeship**  
**Attachment Checklist**  
**Operating Engineer, Time-Based**

Standards Placement	29 CFR, NRS 610, and NAC 610 Required Provisions
Attachment 3	<p>2) <b>Term:</b> A term of apprenticeship of not less than 2,000 hours of work experience, consistent with training requirements as established by practice in the trade. <b>NRS 610.144 3 (b)</b></p> <p><b>Type of Occupation:</b> The term of apprenticeship, which for an individual apprentice may be measured either through the completion of the industry standard for on-the-job learning (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach). <b>29 CFR 29.5 (b)</b></p>
Attachment 4	<p>3) <b>Work Processes:</b> An outline of the processes in which the apprentice will receive supervised experience and training on the job, and the allocation of the approximate time to be spent in each major process. <b>NRS 610.144 3 (c)</b></p>
Attachment 5	<p>4) <b>Related Instruction:</b> Provisions for organized, related and supplemental instruction in technical subjects (and the costs thereof) related to the trade with a minimum of 144 hours for each year of apprenticeship, given in a classroom or through trade, industrial or correspondence courses of equivalent value or other forms of study approved by the State Apprenticeship Council. <b>NRS 610.144 3 (d); NAC 610.433</b></p>
5910 Form	<p>5) <b>Wages:</b> A progressively increasing, reasonable and profitable schedule of wages to be paid to the apprentice consistent with the skills acquired, not less than that allowed by federal or state law or regulations or by a collective bargaining agreement. Employers shall pay a beginning wage for apprentices which is at least 35 percent of the rate for journeymen in the same trade, or Minimum and Reasonable and profitable wage for apprentice in construction industry. <b>NRS 610.144 3 (e); NAC 610.480, NAC 610.485</b></p>
Attachment 3	<p>6) <b>Ratio:</b> A numeric ratio of apprentices to journeymen consistent with proper supervision, training, safety, continuity of employment and applicable provisions in collective bargaining agreements, in language that is specific and clear as to its application in terms of job sites, workforces, departments or plants. <b>NRS 610.144 3 (g)</b></p>
	<p align="center"><b>ALL DOCUMENTS HAVE BEEN CHECKED FOR SPELLING, FORMATTING, GRAMMAR, (INCLUDING TABLE OF CONTENTS), ETC.</b></p>





## **Attachment 3 –Apprentice Operator Program Description**

### **ABC Nevada Apprentice Operator:**

Apprentice Operators are taught to operate heavy equipment of many types of heavy equipment including earth moving equipment such as dozers, scrapers, compactors, backhoes, motor graders, cranes etc.

The Apprentice Operators will complete a total of 6,000 on the job training hours.

Apprentice Operators will also complete a minimum of 432 hours of classroom instruction.

The probationary period for the Apprentice Operators Program will be 1,500 on the job training hours.

To provide for a steady supply of trained persons into the construction industry and to reflect employment opportunities, apprentice to journeyperson ratios will be enacted in accordance with the following provisions. One Apprentice Operator may be trained for the first Journeyperson Operator employed, with a ratio of one Apprentice Operator for every five Journeyperson Operators thereafter. The ratio is per job site and not to exceed the employers overall workforce.

Our registered apprentices will graduate our program with the fundamental skills and knowledge needed to operate the following types of heavy equipment.

## Attachment 4- Apprentice Operator Work Processes

If an Apprentice Operator learns to operate five major pieces of equipment proficiently, they shall be considered diversified and eligible to complete the program when they have accumulated 6,000 on-the-job training hours.

	Suggested Hours
<b>Bulldozer</b>	<b>1,000</b>
(a) Learn the different types of work assigned the dozer from pioneer and rough excavation to finish work, including GPS.	
(b) Learn to make minor adjustments and repairs and work with Heavy Duty Repair Mechanic and/or welder on major repairs.	
<b>Motor Patrol</b>	<b>1,000</b>
(a) Learn to service, maintain and adjust the machine.	
(b) Learn to different types of work the machine does, such as fine grading, back sloping, mixing and laying oil, including GPS.	
(c) Learn to make adjustment and minor repairs with Heavy Duty Repair Mechanic and/or welder on major repairs.	
<b>Scrapers, Self-Propelled</b>	<b>1,000</b>
(a) Learn to operate the various types of motor and motor-electric driven machines, including GPS.	
(b) Learn to service, maintain and repair the different makes of machines.	
<b>Bucket-Type Equipment, Shovel, Backhoe and Other Bucket Type</b>	<b>1,000</b>
(a) Learn the names and uses of various types of draglines, buckets and attachments.	
(b) Learn care, preventive maintenance, proper oil and greases, cables, and minor adjustments.	
(c) Learn to change teeth, cables, adjust frictions, brakes and clutches.	
(d) Learn the controls, their importance in proper operation and movement of the machine for safety of other employees and equipment working near machine.	
(e) Learn to read and set grades stakes, also to read plans and instructions.	
(f) Learn to make major overhauls working with Operator, Heavy Duty Repair Mechanic and/or welder.	
(g) Grades Stakes and Plan Reading.	
(h) Learn the names and uses of various types of shovels, buckets, cables and attachments.	
(i) Learn care, preventive maintenance, proper oils and greases, cables and minor adjustments.	
(j) Learn to change teeth and cables and adjust frictions, brakes and clutches.	
(k) Learn the controls their importance in proper operation and movement of machine for safety of other employees and equipment working near machine.	
(l) Learn to read and set grades stakes, also to read prints and instructions.	
(m) Learn to make major overhauls working with the Operator, heavy Duty Repair Mechanic and/ or welder.	
<b>Grade Checking</b>	<b>1,000</b>
(a) Learn proper use of hand instruments and to read plans for making grades.	
(b) Learn proper use of GPS equipment (Rover) or similar.	



<b>Crawler and Truck Type Cranes, Derricks, Bridges, Towers &amp; Gantry Cranes</b>	<b>500</b>
(a) Learn care, preventative maintenance, proper oils, grease, cables and minor adjustments. (b) Learn the controls, their importance in the proper operation and movements of the machine for the safety of other employees and equipment working near the machine. (c) Learn to make major overhauls working with Operator, Heavy Duty Repair Mechanic and/or welder. (d) Learn to proper load the machine and cables will safety handle. (e) Learn the operating difference between a live boom and regular operation (f) Learn to give and receive proper signals for hoisting, swinging and lowering materials and equipment. (g) Learn to use out-riggers on wheel-type machines for protection of the machine and materials being handled. (h) Learn to understand proper horn and hand signals when assigned to mobile cranes.	
<b>Concrete and Asphalt, Spreaders, Tampers and Finishers</b>	<b>500</b>
(a) Learn to service, make minor repairs, adjust and be able to operate the machine	
<b>Maintenance-Cutting and Welding-Grease and Oils</b>	<b>500</b>
(a) Learn minor repairs and adjustment. (b) Learn Minor welding repair and cutting. (c) Learn the types of greases and oils and their uses.	
<b>Roller – Flat Wheel, Sheep Foot and Pneumatic</b>	<b>400</b>
(a) Learn the purpose of the different rollers, the different procedures for compaction of various materials, remote control and the operation for care off different types of rollers.	
<b>Tractor-Type skip Loaders</b>	<b>400</b>
(a) Learn to operate the various types, service and make minor repair and adjustments.	
<b>Wheel-Type Tractors, Including Fork Lifts, Lumber carriers, High Lifts, etc.</b>	<b>400</b>
(a) Learn to service, maintain, and make minor repairs and adjustments.	
<b>Trenching Machine</b>	<b>400</b>
(a) Learn to operate the various types and sizes of machines, their maintenance and repair. (b) Grades Stakes and Plan Reading.	
<b>Air Compressors-Pumps of all Types and Miscellaneous Equipment</b>	<b>100</b>
(a) Learn the proper servicing and adjustments for proper operation of the machine.	

**TOTAL HOURS 6,000**

## **Attachment 5- Apprentice Operator Related Training Instruction**

### **Level 1: Minimum of 144 Hours**

Orientation to the Trade  
Heavy Equipment Safety  
Identification of Heavy Equipment  
Basic Operational Techniques  
Utility Tractors  
Introduction to Earthmoving  
Grades

### **Level 2: Minimum of 144 Hours**

Rough Terrain Forklifts  
On-Road Dump Trucks  
Excavation Math  
Interpreting Civil Drawings  
Site Work  
Soils  
Skid Steers  
Loaders  
Scrapers

### **Level 3: Minimum of 144 Hours**

Finishing and Grading  
Compaction Equipment  
Backhoes  
Off-Road Dump Trucks  
Dozers  
Excavators  
Motor Graders



Standards of Apprenticeship

2019 Associated Builders and Contractors GNJ

## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER NORTHERN DIVISION**

**Occupation: Carpenter**

**O-NET Code: 47-2031.01 RAPIDS Code: 0067**

**Time-Based Apprenticeship Program**

- ✓ **Similar Program Notice Letters**
- ✓ **Form 5910 – Application for Approval On-the-Job Training & Apprenticeship**
- ✓ **U.S. Department of Labor Apprenticeable Occupation List ONET Code Confirmation**
- ✓ **Attachment 3, 4, 5 Checklist**
- ✓ **Attachment 3 – Program Description**
- ✓ **Attachment 4 – Work Process Schedule**
- ✓ **Attachment 5 – Related Technical Instruction**





January 10, 2020

Bobbie Whitmore  
Southwest Carpenters Training Fund  
4245 W. Sunset Road, Ste. 137  
Las Vegas, NV 89115

Dear Bobbie,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern Division Apprenticeship Trust at its meeting on February 13, 2020.

In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

It has come to our attention that the occupation under consideration for approval by the Council is Carpenter. Our records indicate that your organization has similar occupation.

Attached you will find the standards and accompanying appendices for the proposed occupation. The State Apprenticeship Council will welcome any comments you may have.

Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director



January 10, 2020

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Southwest Carpenters Training Fund  
4245 W. Sunset Road, Ste. 137  
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Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director







STATE OF NEVADA  
Office of the Labor Commissioner  
Nevada State Apprenticeship Council  
APPLICATION FOR APPROVAL  
ON THE JOB TRAINING & APPRENTICE

Program Name ABC Nevada Chapter Northern Division Apprenticeship Trust Fund Program # \_\_\_\_\_

Address 240 S. Rock Blvd. #121 City Reno State NV Telephone 702.227.0538

Contact Person Kara Arenas Title Vice President Type of Program: Construction Sic Code: 1731

Type of Action: (Check One) A. <input type="checkbox"/> Wage Increase B. <input type="checkbox"/> Revision of Standards C. <input checked="" type="checkbox"/> New Occupation	Type of Program: (Check One) A. <input type="checkbox"/> Individual Union B. <input type="checkbox"/> Individual Non Union C. <input type="checkbox"/> Group Union D. <input checked="" type="checkbox"/> Group Non Union E. <input type="checkbox"/> If Union Bargaining Unit	Journey Workers (JW) A. No. of Females <u>0</u> B. No. of Minorities <u>6</u> C. No. JW <u>25</u> D. No. of Employers <u>2</u>	Pay Period <input checked="" type="checkbox"/> Weekly <input type="checkbox"/> Bi-Weekly <input type="checkbox"/> Semi Monthly Pay Increases (Months) <input type="checkbox"/> 3 <input type="checkbox"/> 6 <input type="checkbox"/> 12 <input checked="" type="checkbox"/> Other (every 1,000 hours)
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TRADE INFORMATION

Occupation	Term (OJT hours)	RTI (Classroom hours)	# Of Journey workers	# Of Apprentices In Training	Journey worker Hourly Rate	Days per Week
Construction Carpenter	8,000	576	25	0	\$ 30.00	5

HOURLY APPRENTICE WAGE AND FRINGE BY PERIOD

Occupation	1ST 50%	2ND 55%	3RD 60%	4TH 65%	5TH 70%	6TH 75%	7TH 80%	8TH 85%		
Construction Carpenter Wage	\$ 15.00	\$ 16.50	\$ 18.00	\$ 19.50	\$ 21.00	\$ 22.50	\$ 24.00	\$ 25.50		
Construction Carpenter Fringe Per CFR 29 5.5	1ST 50%	2ND 55%	3RD 60%	4TH 65%	5TH 70%	6TH 75%	7TH 80%	8TH 85%		

Instructor	Occupation	Experience (Years)

11.14.19  
Date

Kara Arenas  
Signature of Program Coordinator

DO NOT WRITE BELOW THIS LINE

Approved: \_\_\_\_\_

Disapproved: \_\_\_\_\_

Secretary Director of Apprenticeship

Date





## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER NORTHERN DIVISION**

**Occupation – Carpenter**  
**O-NET Code: 47-2031.01 RAPIDS Code: 0067**  
**Time-Based Apprenticeship Program**

U.S. Department of Labor Apprenticeable Occupation List:

CARPENTER	0067	<a href="#">47-2031.00</a>	8000	TB
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Link to list: <https://www.doleta.gov/oa/occupations.cfm>



**2019 ABC GNJ Standards of Apprenticeship  
Attachment Checklist  
Carpenter, Time-Based**

Standards Placement	29 CFR, NRS 610, and NAC 610 Required Provisions
Attachment 3	<p>2) <b>Term:</b> A term of apprenticeship of not less than 2,000 hours of work experience, consistent with training requirements as established by practice in the trade. <b>NRS 610.144 3 (b)</b></p> <p><b>Type of Occupation:</b> The term of apprenticeship, which for an individual apprentice may be measured either through the completion of the industry standard for on-the-job learning (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach). <b>29 CFR 29.5 (b)</b></p>
Attachment 4	<p>3) <b>Work Processes:</b> An outline of the processes in which the apprentice will receive supervised experience and training on the job, and the allocation of the approximate time to be spent in each major process. <b>NRS 610.144 3 (c)</b></p>
Attachment 5	<p>4) <b>Related Instruction:</b> Provisions for organized, related and supplemental instruction in technical subjects (and the costs thereof) related to the trade with a minimum of 144 hours for each year of apprenticeship, given in a classroom or through trade, industrial or correspondence courses of equivalent value or other forms of study approved by the State Apprenticeship Council. <b>NRS 610.144 3 (d); NAC 610.433</b></p>
5910 Form	<p>5) <b>Wages:</b> A progressively increasing, reasonable and profitable schedule of wages to be paid to the apprentice consistent with the skills acquired, not less than that allowed by federal or state law or regulations or by a collective bargaining agreement. Employers shall pay a beginning wage for apprentices which is at least 35 percent of the rate for journeymen in the same trade, or Minimum and Reasonable and profitable wage for apprentice in construction industry. <b>NRS 610.144 3 (e); NAC 610.480, NAC 610.485</b></p>
Attachment 3	<p>6) <b>Ratio:</b> A numeric ratio of apprentices to journeymen consistent with proper supervision, training, safety, continuity of employment and applicable provisions in collective bargaining agreements, in language that is specific and clear as to its application in terms of job sites, workforces, departments or plants. <b>NRS 610.144 3 (g)</b></p>
	<p align="center"><b>ALL DOCUMENTS HAVE BEEN CHECKED FOR SPELLING, FORMATTING, GRAMMAR, (INCLUDING TABLE OF CONTENTS), ETC.</b></p>





## **Attachment 3 – Construction Carpentry Apprentice Program Description**

The Construction Carpentry Apprentice will complete a total of 8,000 on the job training hours.

Construction Carpentry Apprentice will also complete a minimum of 576 hours of classroom instruction.

The probationary period for the Construction Carpentry Apprentice Program will be 2,000 on the job training hours.

To provide for a steady supply of trained persons into the construction industry and to reflect employment opportunities, apprentice to journeyperson ratios will be enacted in accordance with the following provisions. One Construction Carpentry Apprentice may be trained for the first Journeyperson Carpenter employed, with a ratio of one Construction Carpentry Apprentice for every two Journeyperson Carpenter thereafter. The ratio is per job site and not to exceed the employers overall workforce.

Our registered apprentices will graduate our program with the fundamental skills and knowledge needed to complete as a Journey worker Carpenter.

## **Attachment 4- Construction Carpenter Apprentice Work Processes**

	<b>Approximate Hours</b>
<b>Basic Knowledge &amp; Safety</b>	<b>1500</b>
1. Job Site Preparation	
2. Basic Prints and Layouts	
3. Tool Instruction and use	
4. Material Identification and Use	
<b>Supplemental Skills</b>	<b>1500</b>
1. Construction Safety	
2. Operating Power Lifts	
3. Rigging and Signaling	
4. Proper Material Transportation and Storage	
5. Use of Powder Actuated and Pneumatic Tools	
6. Erecting and Dismantling	
7. Stocking and Scrapping	
8. Installation of Fire Stop	
9. Installing Fall Protection, Barricade Systems and Fall Restraints	
10. Installation and Dismantling	
11. Set-up & Use of Total Station	
<b>General Skills</b>	<b>2500</b>
1. Job Preparation	
2. Blue print Interpretation	
3. Material Identification and Use	
4. Measuring and Layout Skills	
5. Framing or Finish Carpentry Skills Basic	
6. Concrete Skills Basic	
<b>Advance Skills</b>	<b>2500</b>
1. Installation Methods and Techniques	
2. Attachment Methods and Hardware	
3. Framing or Finish Carpentry Skills Advanced	
4. Concrete Skills Advanced	

**Total OJT Hours: 8000**



## Attachment 5- Construction Carpenter Apprentice Related Classroom Instruction

<b>Year 1: 144 CRI Instruction</b>
Orientation to the Trade
Building Materials, Fasteners, and Adhesives
Hand and Power Tools
Introduction to Construction Drawings, Specifications, and Layout
Floor Systems
Wall Systems
Ceiling Joist and Roof Framing
Introduction to Building Envelope Systems
Basic Stair Layout
<b>Year 2: 144 CRI Instruction</b>
Commercial Drawings
Cold-Formed Steel Framing
Exterior Finishing
Thermal and Moisture Protection
Roofing Applications
Doors and Door Hardware
Drywall Installation
Drywall Finishing
Suspended Ceilings
Window, Door, Floor, and Ceiling Trim
Cabinet Installation
<b>Year 3: 144 CRI Instruction</b>
Properties of Concrete
Rigging Equipment
Rigging Practices
Trenching and Excavating
Reinforcing Concrete
Foundations and Slabs-On-Grade
Vertical Formwork
Horizontal Formwork
Handling and Placing Concrete
Tilt-Up Wall Systems
<b>Year 4: 144 CRI Instruction</b>
Site Layout One: Differential Leveling
Site Layout Two: Angular and Distance Measurement
Advanced Roof Systems
Advanced Wall Systems
Advanced Stair Systems
Introduction to Construction Equipment
Introduction to Oxyfuel Cutting and Arc Welding
Site Preparation
Fundamentals of Crew Leadership





Standards of Apprenticeship

2019 Associated Builders and Contractors GNJ

## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER SOUTHERN DIVISION**

**Occupation: Carpenter**

**O-NET Code: 47-2031.01 RAPIDS Code: 0067**

**Time-Based Apprenticeship Program**

- ✓ **Similar Program Notice Letters**
- ✓ **Form 5910 – Application for Approval On-the-Job Training & Apprenticeship**
- ✓ **U.S. Department of Labor Apprenticeable Occupation List ONET Code Confirmation**
- ✓ **Attachment 3, 4, 5 Checklist**
- ✓ **Attachment 3 – Program Description**
- ✓ **Attachment 4 – Work Process Schedule**
- ✓ **Attachment 5 – Related Technical Instruction**





January 10, 2020

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Southwest Carpenters Training Fund  
4245 W. Sunset Road, Ste. 137  
Las Vegas, NV 89115

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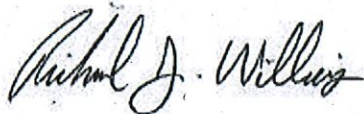
In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

It has come to our attention that the occupation under consideration for approval by the Council is Carpenter. Our records indicate that your organization has similar occupation.

Attached you will find the standards and accompanying appendices for the proposed occupation. The State Apprenticeship Council will welcome any comments you may have.

Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director





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STATE OF NEVADA  
Office of the Labor Commissioner  
Nevada State Apprenticeship Council  
APPLICATION FOR APPROVAL  
ON THE JOB TRAINING & APPRENTICE

Program Name ABC Nevada Chapter Southern Division Apprenticeship Trust Fund Program # \_\_\_\_\_

Address 5070 Arville St. #4 City Las Vegas State NV Telephone 702.227.0536

Contact Person Kara Arenas Title Vice President Type of Program: Construction Sic Code: 1731

Type of Action: (Check One) A. <input type="checkbox"/> Wage Increase B. <input type="checkbox"/> Revision of Standards C. <input checked="" type="checkbox"/> New Occupation	Type of Program: (Check One) A. <input type="checkbox"/> Individual Union B. <input type="checkbox"/> Individual Non Union C. <input type="checkbox"/> Group Union D. <input checked="" type="checkbox"/> Group Non Union E. <input type="checkbox"/> If Union Bargaining Unit	Journey Workers (JW) A. No. of Females <u>1</u> B. No. of Minorities <u>36</u> C. No. JW <u>83</u> D. No. of Employers <u>4</u>	Pay Period <input checked="" type="checkbox"/> Weekly <input type="checkbox"/> Bi-Weekly <input type="checkbox"/> Semi Monthly Pay Increases (Months) <input type="checkbox"/> 3 <input type="checkbox"/> 6 <input type="checkbox"/> 12 <input checked="" type="checkbox"/> Other (every 1,000 hours)
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TRADE INFORMATION

Occupation	Term (OJT hours)	RTI (Classroom hours)	# Of Journey workers	# Of Apprentices in Training	Journey worker Hourly Rate	Days per Week
Construction Carpenter	8,000	576	83	0	\$ 30.00	5

HOURLY APPRENTICE WAGE AND FRINGE BY PERIOD

Occupation	1ST 50%	2ND 55%	3RD 60%	4TH 65%	5TH 70%	6TH 75%	7TH 80%	8TH 85%		
Construction Carpenter Wage	\$ 15.00	\$ 16.50	\$ 18.00	\$ 19.50	\$ 21.00	\$ 22.50	\$ 24.00	\$ 25.50		
Construction Carpenter Fringe Per CFR 29 5.5	1ST 50%	2ND 55%	3RD 60%	4TH 65%	5TH 70%	6TH 75%	7TH 80%	8TH 85%		

Instructor	Occupation	Experience (Years)

11.14.19  
Date

Kara Arenas  
Signature of Program Coordinator

DO NOT WRITE BELOW THIS LINE

Approved: \_\_\_\_\_

Disapproved: \_\_\_\_\_

Secretary Director of Apprenticeship

Date \_\_\_\_\_





## ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER SOUTHERN DIVISION

Occupation – Carpenter  
O-NET Code: 47-2031.01 RAPIDS Code: 0067  
Time-Based Apprenticeship Program

U.S. Department of Labor Apprenticeable Occupation List:

CARPENTER	0067	<a href="#">47-2031.00</a>	8000	TB
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Link to list: <https://www.doleta.gov/oa/occupations.cfm>





**2019 ABC GNJ Standards of Apprenticeship  
Attachment Checklist  
Carpenter, Time-Based**

Standards Placement	29 CFR, NRS 610, and NAC 610 Required Provisions
Attachment 3	<p>2) <b>Term:</b> A term of apprenticeship of not less than 2,000 hours of work experience, consistent with training requirements as established by practice in the trade. <b>NRS 610.144 3 (b)</b></p> <p><b>Type of Occupation:</b> The term of apprenticeship, which for an individual apprentice may be measured either through the completion of the industry standard for on-the-job learning (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach). <b>29 CFR 29.5 (b)</b></p>
Attachment 4	<p>3) <b>Work Processes:</b> An outline of the processes in which the apprentice will receive supervised experience and training on the job, and the allocation of the approximate time to be spent in each major process. <b>NRS 610.144 3 (c)</b></p>
Attachment 5	<p>4) <b>Related Instruction:</b> Provisions for organized, related and supplemental instruction in technical subjects (and the costs thereof) related to the trade with a minimum of 144 hours for each year of apprenticeship, given in a classroom or through trade, industrial or correspondence courses of equivalent value or other forms of study approved by the State Apprenticeship Council. <b>NRS 610.144 3 (d); NAC 610.433</b></p>
5910 Form	<p>5) <b>Wages:</b> A progressively increasing, reasonable and profitable schedule of wages to be paid to the apprentice consistent with the skills acquired, not less than that allowed by federal or state law or regulations or by a collective bargaining agreement. Employers shall pay a beginning wage for apprentices which is at least 35 percent of the rate for journeymen in the same trade, or Minimum and Reasonable and profitable wage for apprentice in construction industry. <b>NRS 610.144 3 (e); NAC 610.480, NAC 610.485</b></p>
Attachment 3	<p>6) <b>Ratio:</b> A numeric ratio of apprentices to journeymen consistent with proper supervision, training, safety, continuity of employment and applicable provisions in collective bargaining agreements, in language that is specific and clear as to its application in terms of job sites, workforces, departments or plants. <b>NRS 610.144 3 (g)</b></p>
	<p align="center"><b>ALL DOCUMENTS HAVE BEEN CHECKED FOR SPELLING, FORMATTING, GRAMMAR, (INCLUDING TABLE OF CONTENTS), ETC.</b></p>



### **Attachment 3 – Construction Carpentry Apprentice Program Description**

The Construction Carpentry Apprentice will complete a total of 8,000 on the job training hours.

Construction Carpentry Apprentice will also complete a minimum of 576 hours of classroom instruction.

The probationary period for the Construction Carpentry Apprentice Program will be 2,000 on the job training hours.

To provide for a steady supply of trained persons into the construction industry and to reflect employment opportunities, apprentice to journeyperson ratios will be enacted in accordance with the following provisions. One Construction Carpentry Apprentice may be trained for the first Journeyperson Carpenter employed, with a ratio of one Construction Carpentry Apprentice for every two Journeyperson Carpenter thereafter. The ratio is per job site and not to exceed the employers overall workforce.

Our registered apprentices will graduate our program with the fundamental skills and knowledge needed to complete as a Journey worker Carpenter.



## **Attachment 4- Construction Carpenter Apprentice Work Processes**

### **Approximate Hours**

#### **Basic Knowledge & Safety**

**1500**

1. Job Site Preparation
2. Basic Prints and Layouts
3. Tool Instruction and use
4. Material Identification and Use

#### **Supplemental Skills**

**1500**

1. Construction Safety
2. Operating Power Lifts
3. Rigging and Signaling
4. Proper Material Transportation and Storage
5. Use of Powder Actuated and Pneumatic Tools
6. Erecting and Dismantling
7. Stocking and Scrapping
8. Installation of Fire Stop
9. Installing Fall Protection, Barricade Systems and Fall Restraints
10. Installation and Dismantling
11. Set-up & Use of Total Station

#### **General Skills**

**2500**

1. Job Preparation
2. Blue print Interpretation
3. Material Identification and Use
4. Measuring and Layout Skills
5. Framing or Finish Carpentry Skills Basic
6. Concrete Skills Basic

#### **Advance Skills**

**2500**

1. Installation Methods and Techniques
2. Attachment Methods and Hardware
3. Framing or Finish Carpentry Skills Advanced
4. Concrete Skills Advanced

**Total OJT Hours: 8000**

## Attachment 5- Construction Carpenter Apprentice Related Classroom Instruction

<b>Year 1: 144 CRI Instruction</b>
Orientation to the Trade
Building Materials, Fasteners, and Adhesives
Hand and Power Tools
Introduction to Construction Drawings, Specifications, and Layout
Floor Systems
Wall Systems
Ceiling Joist and Roof Framing
Introduction to Building Envelope Systems
Basic Stair Layout
<b>Year 2: 144 CRI Instruction</b>
Commercial Drawings
Cold-Formed Steel Framing
Exterior Finishing
Thermal and Moisture Protection
Roofing Applications
Doors and Door Hardware
Drywall Installation
Drywall Finishing
Suspended Ceilings
Window, Door, Floor, and Ceiling Trim
Cabinet Installation
<b>Year 3: 144 CRI Instruction</b>
Properties of Concrete
Rigging Equipment
Rigging Practices
Trenching and Excavating
Reinforcing Concrete
Foundations and Slabs-On-Grade
Vertical Formwork
Horizontal Formwork
Handling and Placing Concrete
Tilt-Up Wall Systems
<b>Year 4: 144 CRI Instruction</b>
Site Layout One: Differential Leveling
Site Layout Two: Angular and Distance Measurement
Advanced Roof Systems
Advanced Wall Systems
Advanced Stair Systems
Introduction to Construction Equipment
Introduction to Oxyfuel Cutting and Arc Welding
Site Preparation
Fundamentals of Crew Leadership







Standards of Apprenticeship

2019 Associated Builders and Contractors GNJ

## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER NORTHERN DIVISION**

**Occupation: Sheet Metal Worker  
O-NET Code: 47-2211.00 RAPIDS Code: 0510  
Time-Based Apprenticeship Program**

- ✓ **Similar Program Notice Letters**
- ✓ **Form 5910 – Application for Approval On-the-Job Training & Apprenticeship**
- ✓ **U.S. Department of Labor Apprenticeable Occupation List ONET Code Confirmation**
- ✓ **Attachment 3, 4, 5 Checklist**
- ✓ **Attachment 3 – Program Description**
- ✓ **Attachment 4 – Work Process Schedule**
- ✓ **Attachment 5 – Related Technical Instruction**



January 10, 2020

Josh Morrow  
Sheet Metal Local 26 JATC  
1237 Gator Way  
Sparks, NV 89431

Dear Josh,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern Division Apprenticeship Trust at its meeting on February 13, 2020.

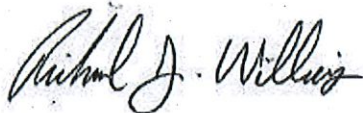
In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

It has come to our attention that the occupation under consideration for approval by the Council is Sheet Metal Worker. Our records indicate that your organization has a similar occupation.

Attached you will find the standards and accompanying appendices for the proposed occupation. The State Apprenticeship Council will welcome any comments you may have.

Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director





January 10, 2020

Graviela Garcia  
Sheet Metal Local 88 JATC  
2540 Marco Street  
Las Vegas, NV 89115

Dear Graviela,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern Division Apprenticeship Trust at its meeting on February 13, 2020.

In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

It has come to our attention that the occupation under consideration for approval by the Council is Sheet Metal Worker. Our records indicate that your organization has a similar occupation.

Attached you will find the standards and accompanying appendices for the proposed occupation. The State Apprenticeship Council will welcome any comments you may have.

Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director







STATE OF NEVADA  
Office of the Labor Commissioner  
Nevada State Apprenticeship Council

APPLICATION FOR APPROVAL  
ON THE JOB TRAINING & APPRENTICE

Program Name ABC Nevada Chapter Northern Division Apprenticeship Trust Fund Program # \_\_\_\_\_

Address 240 South Rock Blvd. #121 City Reno State NV Telephone 702.227.0536

Contact Person Kara Arenas Title Vice President Type of Program: Construction Sic Code: \_\_\_\_\_

Type of Action: (Check One) A. <input type="checkbox"/> Wage Increase B. <input type="checkbox"/> Revision of Standards C. <input checked="" type="checkbox"/> New Occupation	Type of Program: (Check One) A. <input type="checkbox"/> Individual Union B. <input type="checkbox"/> Individual Non Union C. <input type="checkbox"/> Group Union D. <input checked="" type="checkbox"/> Group Non Union E. <input type="checkbox"/> If Union Bargaining Unit	Journey Workers (JW) A. No. of Females <u>0</u> B. No. of Minorities <u>6</u> C. No. JW <u>28</u> D. No. of Employers <u>3</u>	Pay Period <input checked="" type="checkbox"/> Weekly <input type="checkbox"/> Bi-Weekly <input type="checkbox"/> Semi Monthly Pay Increases (Months) <input type="checkbox"/> 3 <input type="checkbox"/> 6 <input type="checkbox"/> 12 <input checked="" type="checkbox"/> Other (every 1,000 hours)
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TRADE INFORMATION

Occupation	Term (OJT hours)	RTI (Classroom hours)	# Of Journey workers	# Of Apprentices In Training	Journey worker Hourly Rate	Days per Week
Construction Sheet Metal	8,000	576	28	0	\$ 30.00	5

HOURLY APPRENTICE WAGE AND FRINGE BY PERIOD

Occupation	1ST 50%	2ND 55%	3RD 60%	4TH 65%	5TH 70%	6TH 75%	7TH 80%	8TH 85%		
Construction Sheet Metal	\$ 15.00	\$ 16.50	\$ 18.00	\$ 19.50	\$ 21.00	\$ 22.50	\$ 24.00	\$ 25.50		
Construction Sheet Metal Fringe Per CFR 29 5.5	1ST 50%	2ND 55%	3RD 60%	4TH 65%	5TH 70%	6TH 75%	7TH 80%	8TH 85%		

Instructor	Occupation	Experience (Years)

10.29.19  
Date

Kara Arenas  
Signature of Program Coordinator

DO NOT WRITE BELOW THIS LINE

Approved: \_\_\_\_\_

Disapproved: \_\_\_\_\_

Secretary Director of Apprenticeship

Date



## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER NORTHERN DIVISION**

**Occupation – Sheet Metal Worker  
O-NET Code: 47-2211.00 RAPIDS Code: 0510  
Time-Based Apprenticeship Program**

U.S. Department of Labor Apprenticeable Occupation List:

SHEET METAL WORKER	0510	<a href="#">47-2211.00</a>	8000	TB
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Link to list: <https://www.doleta.gov/oa/occupations.cfm>





**2019 ABC GNJ Standards of Apprenticeship  
Attachment Checklist  
Sheet Metal Worker, Time-Based**

Standards Placement	29 CFR, NRS 610, and NAC 610 Required Provisions
Attachment 3	<p>2) <b>Term:</b> A term of apprenticeship of not less than 2,000 hours of work experience, consistent with training requirements as established by practice in the trade. <b>NRS 610.144 3 (b)</b></p> <p><b>Type of Occupation:</b> The term of apprenticeship, which for an individual apprentice may be measured either through the completion of the industry standard for on-the-job learning (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach). <b>29 CFR 29.5 (b)</b></p>
Attachment 4	<p>3) <b>Work Processes:</b> An outline of the processes in which the apprentice will receive supervised experience and training on the job, and the allocation of the approximate time to be spent in each major process. <b>NRS 610.144 3 (c)</b></p>
Attachment 5	<p>4) <b>Related Instruction:</b> Provisions for organized, related and supplemental instruction in technical subjects (and the costs thereof) related to the trade with a minimum of 144 hours for each year of apprenticeship, given in a classroom or through trade, industrial or correspondence courses of equivalent value or other forms of study approved by the State Apprenticeship Council. <b>NRS 610.144 3 (d); NAC 610.433</b></p>
5910 Form	<p>5) <b>Wages:</b> A progressively increasing, reasonable and profitable schedule of wages to be paid to the apprentice consistent with the skills acquired, not less than that allowed by federal or state law or regulations or by a collective bargaining agreement. Employers shall pay a beginning wage for apprentices which is at least 35 percent of the rate for journeymen in the same trade, or Minimum and Reasonable and profitable wage for apprentice in construction industry. <b>NRS 610.144 3 (e); NAC 610.480, NAC 610.485</b></p>
Attachment 3	<p>6) <b>Ratio:</b> A numeric ratio of apprentices to journeymen consistent with proper supervision, training, safety, continuity of employment and applicable provisions in collective bargaining agreements, in language that is specific and clear as to its application in terms of job sites, workforces, departments or plants. <b>NRS 610.144 3 (g)</b></p>
	<p align="center"><b>ALL DOCUMENTS HAVE BEEN CHECKED FOR SPELLING, FORMATTING, GRAMMAR, (INCLUDING TABLE OF CONTENTS), ETC.</b></p>



### **Attachment 3 – Construction Sheet Metal Apprentice Program Description**

The Construction Sheet Metal Apprentice will complete a total of 8,000 on the job training hours.

Construction Sheet Metal Apprentice will also complete a minimum of 576 hours of classroom instruction.

The probationary period for the Construction Sheet Metal Apprentice will be 2,000 on the job training hours.

To provide for a steady supply of trained persons into the construction industry and to reflect employment opportunities, apprentice to journeyperson ratios will be enacted in accordance with the following provisions. One Construction Sheet Metal Apprentice may be trained for the first Journeyperson employed, with a ratio of one Construction Sheet Metal Apprentice for every two Journeypersons thereafter. The ratio is per job site and not to exceed the employers overall workforce.

Our registered apprentices will graduate our program with the fundamental skills and knowledge needed to complete as a skilled Sheet Metal Worker.



## **Attachment 4- Construction Sheet Metal Apprentice Work Processes**

Use of Hand Tools	350 OJT Hours
Use of machine tools and processes	1000 OJT Hours
Flux, rivets and fastening devices	500 OJT Hours
Measurements and layouts	650 OJT Hours
Benchwork	1100 OJT Hours
Welding	750 OJT Hours
Installing duct work and equipment	2050 OJT Hours
General sheet fabrication and installation of skylights and ventilators	1000 OJT Hours
Safety Practices	500 OJT Hours
Installation of duct work (lining etc.)	100 OJT Hours

**TOTAL HOURS: 8,000 OJT Hours**



## **Attachment 5- Construction Sheet Metal Apprentice Related Classroom Instruction**

### **Year 1: 144 Minimum CRI**

Introduction to the Sheet Metal Trade  
Tools of the Trade  
Introduction to Sheet Metal Layout and Processes  
Trade Math One  
Fabrication One  
Installation of Ductwork  
Installation of Air Distribution Accessories  
Insulation  
Architectural Sheet Metal

### **Year 2: 144 Minimum CRI**

Trade Math Two  
Plans and Specifications  
Fabrication Two – Radial Line Development  
Sheet Metal Duct Fabrication Standards  
Air Properties and Distribution  
Bend Allowances  
Soldering  
Basic Piping Practices  
Fiberglass Duct

### **Year 3: 144 Minimum CRI**

Trade Math Three – Field Measuring and Fitting  
Air Systems  
Principles of Airflow  
Louvers, Dampers, and Access Doors  
Comprehensive Plan and Specification Reading  
Fabrication Three – Triangulation  
Advanced Architectural Sheet Metal

### **Year 4: 144 Minimum CRI**

Shop Production and Organization  
Air Testing and Balancing  
Introduction to Welding, Brazing and Cutting  
Fume and Exhaust System Design  
Fabrication Four – Comprehensive Review  
Introductory Supervisory Skills





Standards of Apprenticeship

2019 Associated Builders and Contractors GNJ

## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER NORTHERN DIVISION**

**Occupation: Telecommunications Technician  
O-NET Code: 49-2022.00 RAPIDS Code: 0618  
Time-Based Apprenticeship Program**

- ✓ **Similar Program Notice Letters**
- ✓ **Form 5910 – Application for Approval On-the-Job Training & Apprenticeship**
- ✓ **U.S. Department of Labor Apprenticeable Occupation List ONET Code Confirmation**
- ✓ **U.S. Department of Labor Guidelines for Competency-based, Hybrid and Time-based Apprenticeships**
- ✓ **Attachment 3, 4, 5 Checklist**
- ✓ **Attachment 3 – Program Description**
- ✓ **Attachment 4 – Work Process Schedule**
- ✓ **Attachment 5 – Related Technical Instruction**





January 10, 2020

Madison Burnett  
Electrical JATC of Southern Nevada Local 357  
620 Leigon Way  
Las Vegas, NV 89110

Dear Madison,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern and Southern Division Apprenticeship Trust at its meeting on February 13, 2020.


In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

It has come to our attention that the occupation under consideration for approval by the Council is Telecommunications Technician. Our records indicate that your organization has a similar occupation.

Attached you will find the standards and accompanying appendices for the proposed occupation. The State Apprenticeship Council will welcome any comments you may have.

Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director



January 10, 2020

Alan Darney  
Electrical Local 401  
4635 Longley Avenue, Suite 108  
Reno, NV 89502

Dear Alan,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern and Southern Division Apprenticeship Trust at its meeting on February 13, 2020.

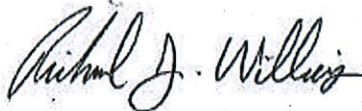
In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

It has come to our attention that the occupation under consideration for approval by the Council is Telecommunications Technician. Our records indicate that your organization has a similar occupation.

Attached you will find the standards and accompanying appendices for the proposed occupation. The State Apprenticeship Council will welcome any comments you may have.

Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director





January 10, 2020

Ryan Bellows  
Sierra Pacific Power  
6100 Neil Road  
Reno, NV 89511

Dear Ryan,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern Division Apprenticeship Trust at its meeting on February 13, 2020.

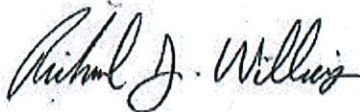
In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

It has come to our attention that the occupation under consideration for approval by the Council is Telecommunication Technician. Our records indicate that your organization has a similar occupation.

Attached you will find the standards and accompanying appendices for the proposed occupation. The State Apprenticeship Council will welcome any comments you may have.

Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director







STATE OF NEVADA  
Office of the Labor Commissioner  
Nevada State Apprenticeship Council

APPLICATION FOR APPROVAL  
ON THE JOB TRAINING & APPRENTICE

Program Name ABC Nevada Chapter Northern Division Apprenticeship Trust Fund Program # \_\_\_\_\_

Address 240 South Rock Blvd. #121 City Reno State NV Telephone 702.227.0536

Contact Person Kara Arenas Title Vice President Type of Program: Construction Sic Code: \_\_\_\_\_

Type of Action: (Check One) A. <input type="checkbox"/> Wage Increase B. <input type="checkbox"/> Revision of Standards C. <input checked="" type="checkbox"/> New Occupation	Type of Program: (Check One) A. <input type="checkbox"/> Individual Union B. <input type="checkbox"/> Individual Non Union C. <input type="checkbox"/> Group Union D. <input checked="" type="checkbox"/> Group Non Union E. <input type="checkbox"/> If Union Bargaining Unit	Journey Workers (JW) A. No. of Females <u>0</u> B. No. of Minorities <u>10</u> C. No. JW <u>35</u> D. No. of Employers <u>3</u>	Pay Period <input checked="" type="checkbox"/> Weekly <input type="checkbox"/> Bi-Weekly <input type="checkbox"/> Semi Monthly Pay Increases (Months) <input type="checkbox"/> 3 <input type="checkbox"/> 6 <input type="checkbox"/> 12 <input checked="" type="checkbox"/> Other (every 1,000 hours)
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TRADE INFORMATION

Occupation	Term (OJT hours)	RTI (Classroom hours)	# Of Journey workers	# Of Apprentices In Training	Journey worker Hourly Rate	Days per Week
Telecommunication Technician	6,000	432	35	0	\$ 30.00	5

HOURLY APPRENTICE WAGE AND FRINGE BY PERIOD

Occupation	1ST 50%	2ND 55%	3rd 60%	4TH 65%	5TH 70%	6TH 75%			
Telecommunication Technician	\$ 15.00	\$ 16.50	\$ 18.00	\$ 19.50	\$ 21.00	\$ 22.50			
Telecommunication Technician Per CFR 29 5.5	1ST 60%	2ND 65%	3RD 60%	4TH 65%	5TH 70%	6TH 75%			

Instructor	Occupation	Experience (Years)
TBD		
TBD		
TBD		

10.29.19  
Date

Kara Arenas  
Signature of Program Coordinator

DO NOT WRITE BELOW THIS LINE

Approved: \_\_\_\_\_

Disapproved: \_\_\_\_\_

Secretary Director of Apprenticeship

Date





## ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER NORTHERN DIVISION


**Occupation – Telecommunications Technician**  
**O-NET Code: 49-2022.00 RAPIDS Code: 0618**  
**Time-Based Apprenticeship Program**

U.S. Department of Labor Apprenticeable Occupation List:

TELECOMMUNICATIONS TECHNICIAN (Alternate Title: Broadband Technician)	0618	<a href="#">49-2022.00</a>	8000	TB
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Link to list: <https://www.doleta.gov/oa/occupations.cfm>



U.S. Department of Labor Employment and Training Administration, Office of Apprenticeship Washington, D.C. 20210	Distribution:  A-541 Headquarters A-544 All Field Tech A-547 SD+RD+SAA+; Lab.Com	Subject: Guidelines for Competency-based, Hybrid and Time-based Apprenticeship Training Approaches  Code: 400.3
<b>Symbols:</b> DSNIP/FDK	 ApprenticeshipUSA	Action: Immediate
<p><b>PURPOSE:</b> To inform the staff of OA and the State Apprenticeship Agencies (SAA), Registered Apprenticeship program sponsors (Sponsor) and other Registered Apprenticeship partners of the replacement of Circulars 95-05 and 2005-03. The purpose of this Circular is to establish compliance and practical design policy for the time-based, competency-based and hybrid approaches for completion of an apprentice's term of apprenticeship. These policies are intended to facilitate Sponsors' efforts to develop and implement program standards that fully integrate apprentices' on-the-job learning and related instruction into the term of apprenticeship, and to assist with the transition from time-based to hybrid and competency-based training approaches.</p>		
<p><b>BACKGROUND:</b> An apprenticeable occupation must meet the requirements of Title 29 Code of Federal Regulations (CFR) part 29, Section 29.4, Criteria for apprenticeable occupation.</p>		
<p><b>§ 29.4 Criteria for apprenticeable occupations</b></p>		
<p>An apprenticeable occupation is one which is specified by industry and which must:</p>		
<ul style="list-style-type: none"> <li>(a) Involve skills that are customarily learned in a practical way through a structured, systematic program of on-the-job supervised learning;</li> <li>(b) Be clearly identified and commonly recognized throughout an industry;</li> <li>(c) Involve the progressive attainment of manual, mechanical or technical skills and knowledge which, in accordance with the industry standard for the occupation, would require the completion of at least 2,000 hours of on-the-job learning to attain; and</li> <li>(d) Require related instruction to supplement the on-the-job learning.</li> </ul>		
<p>Section 29.5(b)(2) permits sponsors to select one of three methods for measuring the completion of the "term of apprenticeship."</p>		
<ul style="list-style-type: none"> <li>• "Competency-based approach" [Section 29.5(b)(2)(ii)] provides for the apprentice's progression through apprenticeship through the acquisition of identified and measured competencies.</li> <li>• "Time-based approach" [Section 29.5(b)(2)(i)] provides for skill acquisition through the apprentice's completion of at least 2,000 hours of on-the-job learning as described in the work process schedule.</li> </ul>		



- “Hybrid approach” [Section 29.5(b)(2)(iii)] provides for the measurement of the apprentice’s skill acquisition through a combination of specified minimum hours of on-the-job learning and the successful demonstration of identified and measured competencies.

Per Section 29.5(b)(2)(iv), the program sponsor makes the determination of the appropriate approach, subject to approval by the Registration Agency of the determination as appropriate to the apprenticeable occupation for which the programs standards are registered.

#### **COMPLIANCE AND DESIGN GUIDELINES:**

Competency means the attainment of manual, mechanical or technical skills and knowledge, as specified by an occupational standard and demonstrated by an appropriate written and hands-on proficiency measurement.

#### **All training approaches for completion of a term of Registered Apprenticeship have the following characteristics:**

- Competencies should be identified and defined through a valid occupational/job task analysis method and directly related to the occupation and the on-the-job learning. Occupations need to be a minimum of 2,000 hours of on-the-job learning, as required by Section 29.4, Criteria for an apprenticeable occupation, and supplemented with the required related technical instruction.
- Time allocations for the workplace activities listed in the work process schedule reflect the training approach utilized.
  - A competency-based approach **does not** require time/hours to be assigned.
  - A hybrid approach requires a minimum and maximum range of time/hours assigned.
  - A time-based approach requires the approximate time/hours.
- Measures or tests of competency attainment and demonstrated skills performance are the responsibility of the sponsor and should be observable, repeatable and agreed to in advance.
  - The methods used to measure or test competency attainment will be defined in the standards of apprenticeship.
  - Assessments should directly link workplace performance requirements with the foundational knowledge and skills (competence) of the apprentice.
  - Assessments on-the-job and off-the-job should be carried out on a structured on-going basis, and include course work, practical assessments and theoretical assessments. Written and practical end-testing may also



be utilized.

- The sponsor should consider utilizing in-house or third-party industry experts as assessors and evaluators of the apprentice's accomplishments.
- Related instruction coursework provides apprentices with the technical, workplace, and knowledge competencies that apply to the job.
  - Theory and task knowledge enable the apprentice to understand the work performed on the job. An analysis is conducted to determine if the skills required in the workplace match the theory and course work that is taught.
  - Related instruction may be front-loaded, segmented, or delivered concurrently with the on-the-job learning. The sequence of related instruction courses should align with the sequence of learning and training required on the job.
  - A minimum of 144 hours for each year of apprenticeship is recommended.
  - Related Instruction may be delivered in a classroom, through academic, vocational, career and technical education courses, and/or via web-based/online courses of equivalent value as approved by the Registration Agency.

*(See Attached Dental Assistant DACUM Job Task Analysis and Competency-based Example)*

- [Dental Assistant Work Process Schedule – Competency-based Approach](#)
- [DACUM Research Chart for Dental Assistant](#)

#### **Competency-based Approach:**

The competency-based approach measures skill acquisition through the individual apprentice's successful demonstration of acquired skills and knowledge, as verified by the sponsor. Programs utilizing this approach must still require apprentices to complete an on-the-job learning component of Registered Apprenticeship. The program standards must address how on-the-job learning will be integrated into the program, describe competencies, and identify an appropriate means of testing and evaluation for such competencies.

Competency-based approaches have an open entry and exit design, which enables apprentices to accelerate the rate of competency achievement or extend the term of training in order to meet performance-based completion requirements.

#### **Hybrid Training Approach:**

Sponsors that choose to utilize a hybrid approach must comply with these guidelines for

the competency-based portion of the apprentice's term of apprenticeship. The hybrid approach specifies a minimum and maximum range of hours of on-the-job learning for each task or job requirement, plus the successful demonstration of acquired skills as described by the task statements listed in the work process schedule.

Under the hybrid approach, the term of the occupation cannot be less than 2,000 hours of on-the-job learning, per Section 29.4 Criteria for apprenticeable occupations. However, once a term of a hybrid occupation has been Approved the range of hours may be adjusted upward or downward by twenty-five (25) percent, but not both ways. For example: a hybrid occupation with a range of 3,000 to 4,000 hours can be increased with a range of 4,000 to 5,000 hours.

A minimum/maximum range of hours would also give the apprentice an opportunity to accelerate the completion of the apprenticeship program with the appropriate test and evaluations provided to the apprentice, by the sponsor.

*(See Attached Dental Assistant Hybrid-based Example)*

- [Dental Assistant Work Process Schedule – Hybrid Approach](#)

#### **Time-based Approach:**

A time-based occupation requires completion of a minimum of 2,000 hours, which includes an outline of the specific work processes in which the apprentice will receive supervised work experience and the allocation of approximate amount of time to be spent in each task or job requirement in the work process schedule for that occupation. The term of an approved time-based occupation can be increased or decreased by 25 percent. The term of a time-based occupation cannot be less than 2,000 hours. ||

*(See Attached Dental Assistant Time-based Example)*

- [WORK PROCESS SCHEDULE DENTAL ASSISTANT](#)

**Table 1: Training Approach Comparison:**

Characteristics	Time-based	Hybrid	Competency-based
Must be an approved apprenticeable occupation as required in Section 29.4.	Yes	Yes	Yes
Occupation term requires a minimum of 2,000 hours (one-year) of on-the-job learning.	Yes	Yes	No
An apprentice must be registered in an approved competency-based occupation for twelve (12) calendar	No	No	Yes



months of on-the- job learning.			
Work process schedule task statements are derived from a valid occupation/job task analysis method (expert workers, and subject matter experts).	Yes	Yes	Yes
Outline of the specific work processes and the approximate time requirement for each individual work process.	Yes	No	No
Outline of the specific work processes and the minimum - maximum time requirement for each individual work process.	No	Yes	No
Performance measures are developed from occupation/job task analysis.	N/A	Yes	Yes
Time-based assessment for completion of workplace competencies.	Yes	Yes	No
Performance assessment of workplace skills and task knowledge.	No	Yes	Yes
Written assessment of theory, knowledge, and academic competencies.	Yes	Yes	Yes
The Related Instruction component must comply with all of the provisions of Section 29.5(b)(4).	Yes	Yes	Yes
Related instruction aligns with technical, workplace and academic competencies that apply to the job.	Yes	Yes	Yes
Maximum allowable credit for prior work experience is 50 percent of training.	Yes	Yes	Yes
The apprentices must be evaluated by the employer to determine the competencies they are proficient in or have accomplished to grant them allowable credit for prior work experience.	No	No	Yes
Certificate of Completion will be issued upon satisfactory completion of the requirements of the training approach, as described in the approved Standards of Apprenticeship.	Yes	Yes	Yes
Sponsor maintains record of work-based training, performance assessments and related instruction.	Yes	Yes	Yes

**Certificate of Completion of Apprenticeship - Minimum Requirements:**

The Certificate of Completion of Apprenticeship will be issued by the Registration Agency to those registered apprentices certified and documented by the Sponsor as successfully completing the apprentice training requirements for the competency-based, hybrid, or time-based approach, as specified in the Standards of Apprenticeship. The apprentice is also required to have worked under the Program Sponsor as a registered apprentice, in the apprenticeable occupation for a minimum of six (6) months, exclusive of any prior experience granted.

The Certificate of Completion of Apprenticeship will be issued by the Registration Agency to those registered apprentices certified and documented by the Sponsor as successfully completing the apprentice training requirements for the hybrid, or time-based approach, as specified in the Standards of Apprenticeship. The apprentice is also required to have worked under the Program Sponsor as a registered apprentice, in the apprenticeable occupation for a minimum of 1,000 hours, exclusive of any prior experience granted.

**ACTION:** This policy is intended to assist OA, SAAs and Sponsors and therefore will be utilized by the OA and SAAs to determine if the use of the competency-based approach is suitable for the specific recognized apprenticeable occupation. These policies are designed to ensure that every apprentice has the opportunity to gain all of the necessary knowledge, skills and abilities no matter which approach to the completion of their term of apprenticeship is preferred by their Sponsor.

The OA and SAA staff should familiarize themselves with this Circular.

If you have any questions, please contact Franchella Kendall at (202) 693-3813.

**NOTE:** This circular is being sent via electronic mail.

Attachments

- [CURRICULUM GAP ANALYSIS TOOL](#)



**2019 ABC GNJ Standards of Apprenticeship**  
**Attachment Checklist**  
**Telecommunications Technician, Time-Based**

Standards Placement	29 CFR, NRS 610, and NAC 610 Required Provisions
Attachment 3	<p>2) <b>Term:</b> A term of apprenticeship of not less than 2,000 hours of work experience, consistent with training requirements as established by practice in the trade. <b>NRS 610.144 3 (b)</b></p> <p><b>Type of Occupation:</b> The term of apprenticeship, which for an individual apprentice may be measured either through the completion of the industry standard for on-the-job learning (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach). <b>29 CFR 29.5 (b)</b></p>
Attachment 4	<p>3) <b>Work Processes:</b> An outline of the processes in which the apprentice will receive supervised experience and training on the job, and the allocation of the approximate time to be spent in each major process. <b>NRS 610.144 3 (c)</b></p>
Attachment 5	<p>4) <b>Related Instruction:</b> Provisions for organized, related and supplemental instruction in technical subjects (and the costs thereof) related to the trade with a minimum of 144 hours for each year of apprenticeship, given in a classroom or through trade, industrial or correspondence courses of equivalent value or other forms of study approved by the State Apprenticeship Council. <b>NRS 610.144 3 (d); NAC 610.433</b></p>
5910 Form	<p>5) <b>Wages:</b> A progressively increasing, reasonable and profitable schedule of wages to be paid to the apprentice consistent with the skills acquired, not less than that allowed by federal or state law or regulations or by a collective bargaining agreement. Employers shall pay a beginning wage for apprentices which is at least 35 percent of the rate for journeymen in the same trade, or Minimum and Reasonable and profitable wage for apprentice in construction industry. <b>NRS 610.144 3 (e); NAC 610.480, NAC 610.485</b></p>
Attachment 3	<p>6) <b>Ratio:</b> A numeric ratio of apprentices to journeymen consistent with proper supervision, training, safety, continuity of employment and applicable provisions in collective bargaining agreements, in language that is specific and clear as to its application in terms of job sites, workforces, departments or plants. <b>NRS 610.144 3 (g)</b></p>
	<p align="center"><b>ALL DOCUMENTS HAVE BEEN CHECKED FOR SPELLING, FORMATTING, GRAMMAR, (INCLUDING TABLE OF CONTENTS), ETC.</b></p>





### **Attachment 3 – Telecommunication Technician Program Description**

The ABC Nevada Telecommunication Technician Apprenticeship Program provides the fundamental infrastructure for telecommunications, audio/video, life safety and automation systems. The on-the-job (OJT) training component is also designed to meet the growing national expectation for ITS (Information Transport Systems) as an industry standard for in education a professional workforce.

The Telecommunication Technician Apprentices will complete a total of 6,000 On The Job Training hours.

Telecommunication Technician Apprentices will also complete a minimum of 432 hours of Classroom Instruction.

The probationary period for the Telecommunication Technician Apprenticeship Program will be 1,500 on the job training hours.

To provide for a steady supply of trained persons into the construction industry and to reflect employment opportunities, apprentice to journeyperson ratios will be enacted in accordance with the following provisions. One apprentice may be trained for the first journeyperson employed, with a ratio of one apprentice for every two journeyperson's thereafter. The ratio is per job site and not to exceed the employers overall workforce.

Our registered apprentices will graduate our program with the fundamental skills and knowledge needed to operate the following types of Telecommunication tasks.

## **Attachment 4- Telecommunication Technician Work Processes**

<b>WORK PROCESS (On-The-Job Training)</b>	<b>APPROXIMATE HOURS</b>
<b>1. Prepare for System Installation</b>	<b>500</b>
a. Use Blueprints and Specifications to lay out components	
b. Perform a site survey	
c. Secure area – safety cones, barriers, drop cloths, etc.	
d. Develop overall job plan	
e. Label and tag wire and cable per plans and specs	
f. Fabrication of sub systems	
g. Inventory and take off of parts, tools and equipment	
h. NEC, Safety specific, OSHA and local requirements and amendments	
<b>2. Wire Buildings</b>	<b>1,000</b>
a. Install cable support systems and drill wire path penetrations	
b. Perform a cable pulling setup	
c. Properly pull and secure wire through: J-Hooks, Wire/Cable Tray, D-Rings, Slings, and Conduit	
d. Properly pull and secure fiber optic cable through: Wire/Cable Tray, Innerduct, and Conduit	
e. Pull wire/cable in a multi-story building according to Local Codes	
f. Install firestop devices according to local codes	
g. Build Telecommunications Rooms according to plans and specs	
h. Build equipment racks and install equipment	
i. Install grounding infrastructure according to local codes	
<b>3. Trim, Termination, and Splicing</b>	<b>1,000</b>
a. Prepare wall mounted station locations according to applicable standards	
b. Prepare floor mounted station locations according to applicable standards	
c. Prepare modular furniture and pole mount station locations according to applicable standards	
d. Perform pre-termination functions and “dress” cable	
e. Perform copper IDC terminations	
f. Perform “shielded” copper IDC terminations	
g. Perform copper Modular connector terminations	
h. Perform fiber optic connector terminations	



- i. Perform copper splicing (25 pair and above)
  - j. Perform fiber optic splicing (fusion and mechanical)
- 4. Component Installation 100**
- a. Properly mount and install: switches, servers, routers, uninterruptible power sources, wireless access points, wireless routers, and related equipment.
- 5. Configuration and Programming 100**
- a. Install and/or enter control programs
  - b. Manage and/or install Managed Hardware
  - c. Set-up system instructions and/or train end users
- 6. Testing and Troubleshooting 1,000**
- a. Perform and demonstrate knowledge of Copper Cable Testing
  - b. Demonstrate knowledge of and perform Copper Cable Troubleshooting
  - c. Calculate an Optical Loss Budget
  - d. Demonstrate knowledge of and perform Optical Fiber Troubleshooting
  - e. Perform and demonstrate knowledge of Optical Power Meter Testing
  - f. Demonstrate knowledge of Optical Time Domain Reflectometer Testing
  - g. Perform and demonstrate knowledge of Optical Fiber Troubleshooting
- 7. Retrofit Installations 700**
- a. Identify active circuits
  - b. Trace lines by hand and with a tone set
  - c. Prepare for a "Cutover"
  - d. Establish a "cut sheet" using old and new documentation
  - e. Remove old cross connects and run new cross connects to new cabling
  - f. Demo all unused cable, fasteners and support according to code
  - g. Dispose of scrap properly
- 8. Administration and Documentation 500**
- a. Order and inventory materials and supplies
  - b. Document as-builds and zone diagrams throughout project
  - c. Complete daily reports
  - d. Calculate employee performance data
  - e. Complete safety logs and inspections
  - f. Document and submit test results
  - g. Prepare user Operations and Maintenance instructions
  - h. Submit warranty paperwork

<b>9. Client Documentation &amp; Information</b>	<b>500</b>
a. Review user documentation manuals and instructions	
b. Identify training objectives	
c. Confirm users and their requirements	
d. Develop training and user aides	
e. Demonstrate system function and guide user through system	
f. Ask customers to demonstrate system function	
<b>10. Maintenance and Repair</b>	<b>200</b>
a. Perform scheduled preventative maintenance	
b. Diagnose and repair any problems	
<b>11. Demonstration of Knowledge</b>	<b>200</b>
a. Demonstrate knowledge and identify purpose of codes and standards	
b. Demonstrate knowledge of network topologies	
c. Demonstrate knowledge of network components	
d. Demonstrate knowledge of low-voltage systems and certification requirements	
<b>12. Demonstration of Communication Skills</b>	<b>200</b>
a. Effectively and professionally communicate with customers, vendors, co-workers, supervisors, and other trades.	
<b>TOTAL MINIMUM HOURS REQUIRED</b>	<b>6,000</b>

## **Attachment 5- Telecommunication Technician Related Classroom Instruction**

### **Level 1: Minimum of 144 Hours**

Introduction to the Trade  
Wood and Masonry Construction Methods  
Concrete and Steel Construction Methods  
Pathways and Spaces  
Craft-Related Mathematics  
Hand Bending of Conduit  
Introduction to the National Electrical Code®  
Low-Voltage Cabling  
DC Circuits  
AC Circuits  
Switching Devices and Timers  
Semiconductors and Integrated Circuits

### **Level 2: Minimum of 144 Hours**

Test Equipment  
Introduction to Electrical Drawings  
Introduction to Codes and Standards  
Cable Selection  
Wire and Cable Terminations  
Power Quality and Grounding  
Buses and Networks  
Fiber Optics  
Wireless Communication  
Site Survey, Project Planning, and Doc.  
Fundamentals of Crew Leadership

### **Level 3: Minimum of 144 Hours**

Rack Assembly  
System Commissioning and User Training  
Maintenance and Repair  
Audio Systems  
Video Systems  
Broadband Systems  
Media Management Systems  
Telecommunications Systems  
Residential and Commercial Building Networks  
Intrusion Detection Systems  
Fire Alarm Systems  
Overview of Nurse Call and Signaling Systems  
CCTV Systems  
Access Control Systems





## **ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER SOUTHERN DIVISION**

**Occupation: Telecommunications Technician  
O-NET Code: 49-2022.00 RAPIDS Code: 0618  
Time-Based Apprenticeship Program**

- ✓ **Similar Program Notice Letters**
- ✓ **Form 5910 – Application for Approval On-the-Job Training & Apprenticeship**
- ✓ **U.S. Department of Labor Apprenticeable Occupation List ONET Code Confirmation**
- ✓ **U.S. Department of Labor Guidelines for Competency-based, Hybrid and Time-based Apprenticeships**
- ✓ **Attachment 3, 4, 5 Checklist**
- ✓ **Attachment 3 – Program Description**
- ✓ **Attachment 4 – Work Process Schedule**
- ✓ **Attachment 5 – Related Technical Instruction**





January 10, 2020

Madison Burnett  
Electrical JATC of Southern Nevada Local 357  
620 Leigon Way  
Las Vegas, NV 89110

Dear Madison,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern and Southern Division Apprenticeship Trust at its meeting on February 13, 2020.

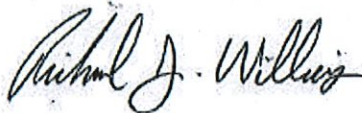
In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

It has come to our attention that the occupation under consideration for approval by the Council is Telecommunications Technician. Our records indicate that your organization has a similar occupation.

Attached you will find the standards and accompanying appendices for the proposed occupation. The State Apprenticeship Council will welcome any comments you may have.

Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director



January 10, 2020

Alan Darney  
Electrical Local 401  
4635 Longley Avenue, Suite 108  
Reno, NV 89502

Dear Alan,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern and Southern Division Apprenticeship Trust at its meeting on February 13, 2020.

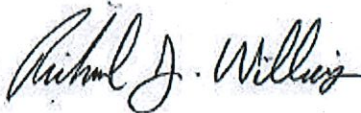
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Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director





January 10, 2020

Ryan Bellows  
Sierra Pacific Power  
6100 Neil Road  
Reno, NV 89511

Dear Ryan,

The State Apprenticeship Council will be considering the approval of an additional occupation for Associated Builders and Contractors Northern Division Apprenticeship Trust at its meeting on February 13, 2020.

In accordance with NAC 610.355, when the Council considers approving a new apprenticeship occupation by an employer or association of employers, the Council must notify existing program sponsors with similar objectives for similar jobs and give them between 30 and 60 days to comment before final action on the proposed occupation is taken.

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Thank you.

Sincerely,



Richard J. Williams  
State Apprenticeship Director







STATE OF NEVADA  
Office of the Labor Commissioner  
Nevada State Apprenticeship Council

APPLICATION FOR APPROVAL  
ON THE JOB TRAINING & APPRENTICE

Program Name ABC Nevada Chapter Southern Division Apprenticeship Trust Fund Program # \_\_\_\_\_

Address 5070 Arville St. #4 City Las Vegas State NV Telephone 702.227.0536

Contact Person Kara Arenas Title Vice President Type of Program: Construction Sio Code: \_\_\_\_\_

Type of Action: (Check One) A. <input type="checkbox"/> Wage Increase B. <input type="checkbox"/> Revision of Standards C. <input checked="" type="checkbox"/> New Occupation	Type of Program: (Check One) A. <input type="checkbox"/> Individual Union B. <input type="checkbox"/> Individual Non Union C. <input type="checkbox"/> Group Union D. <input checked="" type="checkbox"/> Group Non Union E. <input type="checkbox"/> If Union Bargaining Unit	Journey Workers (JW) A. No. of Females <u>2</u> B. No. of Minorities <u>45</u> C. No. JW <u>99</u> D. No. of Employers <u>4</u>	Pay Period <input checked="" type="checkbox"/> Weekly <input type="checkbox"/> Bi-Weekly <input type="checkbox"/> Semi Monthly Pay Increases (Months) <input type="checkbox"/> 3 <input type="checkbox"/> 6 <input type="checkbox"/> 12 <input checked="" type="checkbox"/> Other (every 1,000 hours)
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TRADE INFORMATION

Occupation	Term (OJT hours)	RTI (Classroom hours)	# Of Journey workers	# Of Apprentices In Training	Journey worker Hourly Rate	Days per Week
Telecommunication Technician	6,000	432	99	0	\$ 30.00	5

HOURLY APPRENTICE WAGE AND FRINGE BY PERIOD

Occupation	1 <sup>ST</sup> 50%	2 <sup>ND</sup> 55%	3 <sup>RD</sup> 60%	4 <sup>TH</sup> 65%	5 <sup>TH</sup> 70%	6 <sup>TH</sup> 75%			
Telecommunication Technician	\$ 15.00	\$ 16.50	\$ 18.00	\$ 19.50	\$ 21.00	\$ 22.50			
Telecommunication Technician Per CFR 29 5.5	1 <sup>ST</sup> 50%	2 <sup>ND</sup> 55%	3 <sup>RD</sup> 60%	4 <sup>TH</sup> 65%	5 <sup>TH</sup> 70%	6 <sup>TH</sup> 75%			

Instructor	Occupation	Experience (Years)
TBD		
TBD		
TBD		

10.29.19

Date

Kara Arenas  
Signature of Program Coordinator

DO NOT WRITE BELOW THIS LINE

Approved:

Disapproved: \_\_\_\_\_

Secretary Director of Apprenticeship

Date



## ASSOCIATED BUILDERS AND CONTRACTORS NEVADA CHAPTER SOUTHERN DIVISION

**Occupation – Telecommunications Technician**  
**O-NET Code: 49-2022.00 RAPIDS Code: 0618**  
**Time-Based Apprenticeship Program**

U.S. Department of Labor Apprenticeable Occupation List:

TELECOMMUNICATIONS TECHNICIAN (Alternate Title: Broadband Technician)	0618	<a href="#">49-2022.00</a>	8000	TB
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Link to list: <https://www.doleta.gov/oa/occupations.cfm>





U.S. Department of Labor Employment and Training Administration, Office of Apprenticeship Washington, D.C. 20210	Distribution:  A-541 Headquarters A-544 All Field Tech A-547 SD+RD+SAA+; Lab.Com	Subject: Guidelines for Competency-based, Hybrid and Time-based Apprenticeship Training Approaches  Code: 400.3
<b>Symbols:</b> DSNIP/FDK	 ApprenticeshipUSA	Action: Immediate

**PURPOSE:** To inform the staff of OA and the State Apprenticeship Agencies (SAA), Registered Apprenticeship program sponsors (Sponsor) and other Registered Apprenticeship partners of the replacement of Circulars 95-05 and 2005-03. The purpose of this Circular is to establish compliance and practical design policy for the time-based, competency-based and hybrid approaches for completion of an apprentice's term of apprenticeship. These policies are intended to facilitate Sponsors' efforts to develop and implement program standards that fully integrate apprentices' on-the-job learning and related instruction into the term of apprenticeship, and to assist with the transition from time-based to hybrid and competency-based training approaches.

**BACKGROUND:** An apprenticeable occupation must meet the requirements of Title 29 Code of Federal Regulations (CFR) part 29, Section 29.4, Criteria for apprenticeable occupation.

#### § 29.4 Criteria for apprenticeable occupations

An apprenticeable occupation is one which is specified by industry and which must:

- (a) Involve skills that are customarily learned in a practical way through a structured, systematic program of on-the-job supervised learning;
- (b) Be clearly identified and commonly recognized throughout an industry;
- (c) Involve the progressive attainment of manual, mechanical or technical skills and knowledge which, in accordance with the industry standard for the occupation, would require the completion of at least 2,000 hours of on-the-job learning to attain; and
- (d) Require related instruction to supplement the on-the-job learning.

Section 29.5(b)(2) permits sponsors to select one of three methods for measuring the completion of the "term of apprenticeship."

- "Competency-based approach" [Section 29.5(b)(2)(ii)] provides for the apprentice's progression through apprenticeship through the acquisition of identified and measured competencies.
- "Time-based approach" [Section 29.5(b)(2)(i)] provides for skill acquisition through the apprentice's completion of at least 2,000 hours of on-the-job learning as described in the work process schedule.

- “Hybrid approach” [Section 29.5(b)(2)(iii)] provides for the measurement of the apprentice’s skill acquisition through a combination of specified minimum hours of on-the-job learning and the successful demonstration of identified and measured competencies.

Per Section 29.5(b)(2)(iv), the program sponsor makes the determination of the appropriate approach, subject to approval by the Registration Agency of the determination as appropriate to the apprenticeable occupation for which the programs standards are registered.

#### **COMPLIANCE AND DESIGN GUIDELINES:**

Competency means the attainment of manual, mechanical or technical skills and knowledge, as specified by an occupational standard and demonstrated by an appropriate written and hands-on proficiency measurement.

#### **All training approaches for completion of a term of Registered Apprenticeship have the following characteristics:**

- Competencies should be identified and defined through a valid occupational/job task analysis method and directly related to the occupation and the on-the-job learning. Occupations need to be a minimum of 2,000 hours of on-the-job learning, as required by Section 29.4, Criteria for an apprenticeable occupation, and supplemented with the required related technical instruction.
- Time allocations for the workplace activities listed in the work process schedule reflect the training approach utilized.
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- The sponsor should consider utilizing in-house or third-party industry experts as assessors and evaluators of the apprentice's accomplishments.
- Related instruction coursework provides apprentices with the technical, workplace, and knowledge competencies that apply to the job.
  - Theory and task knowledge enable the apprentice to understand the work performed on the job. An analysis is conducted to determine if the skills required in the workplace match the theory and course work that is taught.
  - Related instruction may be front-loaded, segmented, or delivered concurrently with the on-the-job learning. The sequence of related instruction courses should align with the sequence of learning and training required on the job.
  - A minimum of 144 hours for each year of apprenticeship is recommended.
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*(See Attached Dental Assistant DACUM Job Task Analysis and Competency-based Example)*

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- [DACUM Research Chart for Dental Assistant](#)

### **Competency-based Approach:**

The competency-based approach measures skill acquisition through the individual apprentice's successful demonstration of acquired skills and knowledge, as verified by the sponsor. Programs utilizing this approach must still require apprentices to complete an on-the-job learning component of Registered Apprenticeship. The program standards must address how on-the-job learning will be integrated into the program, describe competencies, and identify an appropriate means of testing and evaluation for such competencies.

Competency-based approaches have an open entry and exit design, which enables apprentices to accelerate the rate of competency achievement or extend the term of training in order to meet performance-based completion requirements.

### **Hybrid Training Approach:**

Sponsors that choose to utilize a hybrid approach must comply with these guidelines for



the competency-based portion of the apprentice's term of apprenticeship. The hybrid approach specifies a minimum and maximum range of hours of on-the-job learning for each task or job requirement, plus the successful demonstration of acquired skills as described by the task statements listed in the work process schedule.

Under the hybrid approach, the term of the occupation cannot be less than 2,000 hours of on-the-job learning, per Section 29.4 Criteria for apprenticeable occupations. However, once a term of a hybrid occupation has been Approved the range of hours may be adjusted upward or downward by twenty-five (25) percent, but not both ways. For example: a hybrid occupation with a range of 3,000 to 4,000 hours can be increased with a range of 4,000 to 5,000 hours.

A minimum/maximum range of hours would also give the apprentice an opportunity to accelerate the completion of the apprenticeship program with the appropriate test and evaluations provided to the apprentice, by the sponsor.

*(See Attached Dental Assistant Hybrid-based Example)*

- [Dental Assistant Work Process Schedule – Hybrid Approach](#)

#### **Time-based Approach:**

A time-based occupation requires completion of a minimum of 2,000 hours, which includes an outline of the specific work processes in which the apprentice will receive supervised work experience and the allocation of approximate amount of time to be spent in each task or job requirement in the work process schedule for that occupation. The term of an approved time-based occupation can be increased or decreased by 25 percent. The term of a time-based occupation cannot be less than 2,000 hours. ||

*(See Attached Dental Assistant Time-based Example)*

- [WORK PROCESS SCHEDULE DENTAL ASSISTANT](#)

**Table 1: Training Approach Comparison:**

Characteristics	Time-based	Hybrid	Competency-based
Must be an approved apprenticeable occupation as required in Section 29.4.	Yes	Yes	Yes
Occupation term requires a minimum of 2,000 hours (one-year) of on-the-job learning.	Yes	Yes	No
An apprentice must be registered in an approved competency-based occupation for twelve (12) calendar	No	No	Yes

months of on-the- job learning.			
Work process schedule task statements are derived from a valid occupation/job task analysis method (expert workers, and subject matter experts).	Yes	Yes	Yes
Outline of the specific work processes and the approximate time requirement for each individual work process.	Yes	No	No
Outline of the specific work processes and the minimum - maximum time requirement for each individual work process.	No	Yes	No
Performance measures are developed from occupation/job task analysis.	N/A	Yes	Yes
Time-based assessment for completion of workplace competencies.	Yes	Yes	No
Performance assessment of workplace skills and task knowledge.	No	Yes	Yes
Written assessment of theory, knowledge, and academic competencies.	Yes	Yes	Yes
The Related Instruction component must comply with all of the provisions of Section 29.5(b)(4).	Yes	Yes	Yes
Related instruction aligns with technical, workplace and academic competencies that apply to the job.	Yes	Yes	Yes
Maximum allowable credit for prior work experience is 50 percent of training.	Yes	Yes	Yes
The apprentices must be evaluated by the employer to determine the competencies they are proficient in or have accomplished to grant them allowable credit for prior work experience.	No	No	Yes
Certificate of Completion will be issued upon satisfactory completion of the requirements of the training approach, as described in the approved Standards of Apprenticeship.	Yes	Yes	Yes
Sponsor maintains record of work-based training, performance assessments and related instruction.	Yes	Yes	Yes



**Certificate of Completion of Apprenticeship - Minimum Requirements:**

The Certificate of Completion of Apprenticeship will be issued by the Registration Agency to those registered apprentices certified and documented by the Sponsor as successfully completing the apprentice training requirements for the competency-based, hybrid, or time-based approach, as specified in the Standards of Apprenticeship. The apprentice is also required to have worked under the Program Sponsor as a registered apprentice, in the apprenticeable occupation for a minimum of six (6) months, exclusive of any prior experience granted.

The Certificate of Completion of Apprenticeship will be issued by the Registration Agency to those registered apprentices certified and documented by the Sponsor as successfully completing the apprentice training requirements for the hybrid, or time-based approach, as specified in the Standards of Apprenticeship. The apprentice is also required to have worked under the Program Sponsor as a registered apprentice, in the apprenticeable occupation for a minimum of 1,000 hours, exclusive of any prior experience granted.

**ACTION:** This policy is intended to assist OA, SAAs and Sponsors and therefore will be utilized by the OA and SAAs to determine if the use of the competency-based approach is suitable for the specific recognized apprenticeable occupation. These policies are designed to ensure that every apprentice has the opportunity to gain all of the necessary knowledge, skills and abilities no matter which approach to the completion of their term of apprenticeship is preferred by their Sponsor.

The OA and SAA staff should familiarize themselves with this Circular.

If you have any questions, please contact Franchella Kendall at (202) 693-3813.

**NOTE:** This circular is being sent via electronic mail.

Attachments

- [CURRICULUM GAP ANALYSIS TOOL](#)

**2019 ABC GNJ Standards of Apprenticeship**  
**Attachment Checklist**  
**Telecommunications Technician, Time-Based**

Standards Placement	29 CFR, NRS 610, and NAC 610 Required Provisions
Attachment 3	<p>2) <b>Term:</b> A term of apprenticeship of not less than 2,000 hours of work experience, consistent with training requirements as established by practice in the trade. <b>NRS 610.144 3 (b)</b></p> <p><b>Type of Occupation:</b> The term of apprenticeship, which for an individual apprentice may be measured either through the completion of the industry standard for on-the-job learning (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach). <b>29 CFR 29.5 (b)</b></p>
Attachment 4	<p>3) <b>Work Processes:</b> An outline of the processes in which the apprentice will receive supervised experience and training on the job, and the allocation of the approximate time to be spent in each major process. <b>NRS 610.144 3 (c)</b></p>
Attachment 5	<p>4) <b>Related Instruction:</b> Provisions for organized, related and supplemental instruction in technical subjects (and the costs thereof) related to the trade with a minimum of 144 hours for each year of apprenticeship, given in a classroom or through trade, industrial or correspondence courses of equivalent value or other forms of study approved by the State Apprenticeship Council. <b>NRS 610.144 3 (d); NAC 610.433</b></p>
5910 Form	<p>5) <b>Wages:</b> A progressively increasing, reasonable and profitable schedule of wages to be paid to the apprentice consistent with the skills acquired, not less than that allowed by federal or state law or regulations or by a collective bargaining agreement. Employers shall pay a beginning wage for apprentices which is at least 35 percent of the rate for journeymen in the same trade, or Minimum and Reasonable and profitable wage for apprentice in construction industry. <b>NRS 610.144 3 (e); NAC 610.480, NAC 610.485</b></p>
Attachment 3	<p>6) <b>Ratio:</b> A numeric ratio of apprentices to journeymen consistent with proper supervision, training, safety, continuity of employment and applicable provisions in collective bargaining agreements, in language that is specific and clear as to its application in terms of job sites, workforces, departments or plants. <b>NRS 610.144 3 (g)</b></p>
	<p align="center"><b>ALL DOCUMENTS HAVE BEEN CHECKED FOR SPELLING, FORMATTING, GRAMMAR, (INCLUDING TABLE OF CONTENTS), ETC..</b></p>





### **Attachment 3 – Telecommunication Technician Program Description**

The ABC Nevada Telecommunication Technician Apprenticeship Program provides the fundamental infrastructure for telecommunications, audio/video, life safety and automation systems. The on-the-job (OJT) training component is also designed to meet the growing national expectation for ITS (Information Transport Systems) as an industry standard for in education a professional workforce.

The Telecommunication Technician Apprentices will complete a total of 6,000 On The Job Training hours.

Telecommunication Technician Apprentices will also complete a minimum of 432 hours of Classroom Instruction.

The probationary period for the Telecommunication Technician Apprenticeship Program will be 1,500 on the job training hours.

To provide for a steady supply of trained persons into the construction industry and to reflect employment opportunities, apprentice to journeyperson ratios will be enacted in accordance with the following provisions. One apprentice may be trained for the first journeyperson employed, with a ratio of one apprentice for every two journeyperson's thereafter. The ratio is per job site and not to exceed the employers overall workforce.

Our registered apprentices will graduate our program with the fundamental skills and knowledge needed to operate the following types of Telecommunication tasks.

## Attachment 4- Telecommunication Technician Work Processes

WORK PROCESS (On-The-Job Training)	APPROXIMATE HOURS
<b>1. Prepare for System Installation</b>	<b>500</b>
a. Use Blueprints and Specifications to lay out components	
b. Perform a site survey	
c. Secure area – safety cones, barriers, drop cloths, etc.	
d. Develop overall job plan	
e. Label and tag wire and cable per plans and specs	
f. Fabrication of sub systems	
g. Inventory and take off of parts, tools and equipment	
h. NEC, Safety specific, OSHA and local requirements and amendments	
<b>2. Wire Buildings</b>	<b>1,000</b>
a. Install cable support systems and drill wire path penetrations	
b. Perform a cable pulling setup	
c. Properly pull and secure wire through: J-Hooks, Wire/Cable Tray, D-Rings, Slings, and Conduit	
d. Properly pull and secure fiber optic cable through: Wire/Cable Tray, Innerduct, and Conduit	
e. Pull wire/cable in a multi-story building according to Local Codes	
f. Install firestop devices according to local codes	
g. Build Telecommunications Rooms according to plans and specs	
h. Build equipment racks and install equipment	
i. Install grounding infrastructure according to local codes	
<b>3. Trim, Termination, and Splicing</b>	<b>1,000</b>
a. Prepare wall mounted station locations according to applicable standards	
b. Prepare floor mounted station locations according to applicable standards	
c. Prepare modular furniture and pole mount station locations according to applicable standards	
d. Perform pre-termination functions and “dress” cable	
e. Perform copper IDC terminations	
f. Perform “shielded” copper IDC terminations	
g. Perform copper Modular connector terminations	
h. Perform fiber optic connector terminations	



- i. Perform copper splicing (25 pair and above)
  - j. Perform fiber optic splicing (fusion and mechanical)
- 4. Component Installation** **100**
- a. Properly mount and install: switches, servers, routers, uninterruptible power sources, wireless access points, wireless routers, and related equipment.
- 5. Configuration and Programming** **100**
- a. Install and/or enter control programs
  - b. Manage and/or install Managed Hardware
  - c. Set-up system instructions and/or train end users
- 6. Testing and Troubleshooting** **1,000**
- a. Perform and demonstrate knowledge of Copper Cable Testing
  - b. Demonstrate knowledge of and perform Copper Cable Troubleshooting
  - c. Calculate an Optical Loss Budget
  - d. Demonstrate knowledge of and perform Optical Fiber Troubleshooting
  - e. Perform and demonstrate knowledge of Optical Power Meter Testing
  - f. Demonstrate knowledge of Optical Time Domain Reflectometer Testing
  - g. Perform and demonstrate knowledge of Optical Fiber Troubleshooting
- 7. Retrofit Installations** **700**
- a. Identify active circuits
  - b. Trace lines by hand and with a tone set
  - c. Prepare for a "Cutover"
  - d. Establish a "cut sheet" using old and new documentation
  - e. Remove old cross connects and run new cross connects to new cabling
  - f. Demo all unused cable, fasteners and support according to code
  - g. Dispose of scrap properly
- 8. Administration and Documentation** **500**
- a. Order and inventory materials and supplies
  - b. Document as-builds and zone diagrams throughout project
  - c. Complete daily reports
  - d. Calculate employee performance data
  - e. Complete safety logs and inspections
  - f. Document and submit test results
  - g. Prepare user Operations and Maintenance Instructions
  - h. Submit warranty paperwork

<b>9. Client Documentation &amp; Information</b>	<b>500</b>
a. Review user documentation manuals and instructions	
b. Identify training objectives	
c. Confirm users and their requirements	
d. Develop training and user aides	
e. Demonstrate system function and guide user through system	
f. Ask customers to demonstrate system function	
<b>10. Maintenance and Repair</b>	<b>200</b>
a. Perform scheduled preventative maintenance	
b. Diagnose and repair any problems	
<b>11. Demonstration of Knowledge</b>	<b>200</b>
a. Demonstrate knowledge and identify purpose of codes and standards	
b. Demonstrate knowledge of network topologies	
c. Demonstrate knowledge of network components	
d. Demonstrate knowledge of low-voltage systems and certification requirements	
<b>12. Demonstration of Communication Skills</b>	<b>200</b>
a. Effectively and professionally communicate with customers, vendors, co-workers, supervisors, and other trades.	
<b>TOTAL MINIMUM HOURS REQUIRED</b>	<b>6,000</b>

## **Attachment 5- Telecommunication Technician Related Classroom Instruction**

### **Level 1: Minimum of 144 Hours**

Introduction to the Trade  
Wood and Masonry Construction Methods  
Concrete and Steel Construction Methods  
Pathways and Spaces  
Craft-Related Mathematics  
Hand Bending of Conduit  
Introduction to the National Electrical Code®  
Low-Voltage Cabling  
DC Circuits  
AC Circuits  
Switching Devices and Timers  
Semiconductors and Integrated Circuits

### **Level 2: Minimum of 144 Hours**

Test Equipment  
Introduction to Electrical Drawings  
Introduction to Codes and Standards  
Cable Selection  
Wire and Cable Terminations  
Power Quality and Grounding  
Buses and Networks  
Fiber Optics  
Wireless Communication  
Site Survey, Project Planning, and Doc.  
Fundamentals of Crew Leadership

### **Level 3: Minimum of 144 Hours**

Rack Assembly  
System Commissioning and User Training  
Maintenance and Repair  
Audio Systems  
Video Systems  
Broadband Systems  
Media Management Systems  
Telecommunications Systems  
Residential and Commercial Building Networks  
Intrusion Detection Systems  
Fire Alarm Systems  
Overview of Nurse Call and Signaling Systems  
CCTV Systems  
Access Control Systems



