

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530



Request for Revision of Standards

TO: Washington State Apprenticeship & Training Council
FROM: City of Seattle, Washington Apprenticeship Committee, #208

Please update our Standards of Apprenticeship to reflect the following changes:

- Additions shall be underlined (underlined).
- Deletions shall be struck through (~~struck through~~).
- See attached.

Form must be signed by Committee Chair and Secretary or Program's Authorized Signer

☐ Chair	Date	☐ Secretary	Date
☒ Authorized Signer	6/20/2023		
Print Name: Lisa Reager	Print Name:		
Signature: 	Signature:		

Approved By: Washington State Apprenticeship & Training Council
Signature of Secretary of the WSATC:
Date:

Attach additional sheets if necessary

Cover Page

Occupational Objective(s):

~~AUTOMOTIVE SHEET METAL~~

SOC#

~~49-3021.00~~

Term [WAC 296-05-015]

~~8000 HOURS~~

Sponsor Introductory Statement (Required):

The following Standards for the development of apprentices have been prepared by representatives of the City of Seattle, in conjunction with the International Association of Machinists & Aerospace Workers, Local 79 and 289, the International Brotherhood of Electrical Workers Local 77, ~~the Automotive Sheet Metal Workers Local 387~~, United Association of Plumbers & Pipefitters, Local 32, and Public Service and Industrial Employees, Local 1239.

IV. Term of Apprenticeship:

Heavy Duty Mechanic and Automotive Sheet Metal: The term of apprenticeship shall not be less than four (4) years or 8,000 hours* of reasonably continuous employment. ***

V. Initial Probationary Period:

C. For the occupations of Heavy Duty Mechanic, ~~Automotive Sheet Metal~~, Cable Splicer, Electrician Constructor, General Electrician Constructor and Hydroelectric Maintenance Machinist: The first 1600 hours of regular straight-time (work) shall constitute the initial probationary period or one year from date of registration, whichever occurs first.

VI. Ratio of Apprentices to Journey Level Workers:

E.

3. Automotive Sheet Metal:

~~Every shop which employs one (1) journey person may have one (1) apprentice, and one (1) apprentice for every additional three (3) journeypersons employed.~~

[Please renumber remaining elements 4 – 7 to 3 – 6.]

VII. Apprentice Wages and Wage Progression:

C. Wage Progression Schedules

2. Automotive Sheet Metal

Step	Hour Range or competency step	Percentage of journey-level wage rate
1	0 – 6 months	67%
2	7 – 12 months	73%
3	13 – 18 months	77%

4	19—24 months	80%
5	25—30 months	85%
6	31—36 months	90%
7	37—48 months	95%

[Please renumber remaining elements 3 – 10 to 2 – 9.]

VIII. Work Processes:

B. Automotive Sheet Metal: Approximate Hours

~~The apprentice shall also perform such other duties in the shop as are commonly related to an automotive sheet metal apprentice. The work experience of an automotive sheet metal apprentice must include the following:~~

- ~~1. Correcting damaged fenders, roughing out, dinging out damaged parts, welding and strengthening, filing, soldering, grinding, removing, replacing and realigning.....1500~~
- ~~2. Refining and spotting, rough and wet sanding, feathering out, cleaning, masking, application of primer and surfacer with spray gun, water sanding1500~~
- ~~3. Repairing and replacing door and body panels, window regulator assembly, removing door lock assembly, removing and replacing upholstery and glass, rehanging and aligning door.....1500~~
- ~~4. Other processes to be learned, body solder and plastic application, use of pneumatic hammer in metal dinging, shrinking of stretched metal, lining up and hanging hoods and decklids, straightening and lining up bumpers, cleaning and polishing various finishes, use and care of spray equipment1500~~
- ~~5. Removing and installing, aligning and finishing turret tops, removing, replacing and repairing shell grill and radiators, also squaring and aligning complete body assembly, and correct installation on frame.....2000~~

~~Total Hours: 8000~~

[Please renumber remaining elements C – M to B – L.]

IX. Related/Supplemental Instruction:

- A.
- ☒ Private Technical/Vocational college

- B. **SEE BELOW** Minimum RSI hours per year defined per the following [see WAC 296-05-015(6)]:

[The occupational titles in the standards are underlined on purpose, these occupations are not new. Please retain the underlines.]

Automotive Sheet Metal, Electrical Constructor, Generation Electrician Constructor, Lineworker, Cable Splicer, Meter Electrician, Hydroelectric Maintenance Machinist and Traffic Signal Electrician: Each apprentice shall enroll in and attend classes in the trade for not less than four (4) hours weekly for a minimum of 144 hours per year during the term of apprenticeship.

Heavy Duty Mechanic: Apprentices will receive a minimum of 144 hour per year of RSI and will receive a total of 587 RSI hours over the course of their apprenticeship. Please note, the RSI is delivered during the first two (2) years as part of the Heavy Duty Diesel program offered by Lake Washington Technical College. Consequently, during years three (3) and four (4), may not achieve the required 144 hours of RSI per year.

For L&I Staff Use OnlyReceived: L&I Tukwila, 2A
September 1, 2023 *SKH*

L&I Apprenticeship Consultant

Teri Gardner 9-1-23

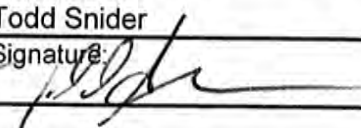
L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530**Request for Revision
of Standards**TO: Washington State Apprenticeship & Training CouncilFROM: City of Seattle, Washington Apprenticeship Committee (#0208)

Please update our Standards of Apprenticeship to reflect the following changes:

- Additions shall be underlined (underlined).
- Deletions shall be struck through (~~struck through~~).
- See attached.

Form must be signed by Committee Chair and Secretary or Program's Authorized Signer

☒ Chair	Date	☐ Secretary	Date
☒ Authorized Signer	08/30/2023		
Print Name: Todd Snider	Print Name:		
Signature: 	Signature:		

Approved By: Washington State Apprenticeship & Training Council
Signature of Secretary of the WSATC:
Date:

Attach additional sheets if necessary

X. Administrative/Disciplinary Procedures:

A. Administrative Procedures:

3. Sponsor Procedures:

e. Local Apprenticeship Committee Policies

- (1) Apprenticeship Administrative Guidelines and Apprenticeship Operating procedures recommended by each Apprenticeship Subcommittee and approved by the JATC, which may from time to time be added to or updated. When these policies/procedures are updated, apprentices will be given proper notice.

B. Disciplinary Procedures:

3. Sponsor Disciplinary Procedures:

- d. ~~If an apprentice misses more than two (2) related training classes in any quarter without prior approval by the Apprenticeship Subcommittee or their representative, the apprentice may be subject to disciplinary action imposed by the JATC, up to and including suspension or cancellation of their apprenticeship agreement.~~ If an apprentice misses related training classes without prior written approval by the Apprenticeship Subcommittee or their representatives, the apprentice may be subject to disciplinary action by the JATC, up to and including suspension or cancelation of their apprenticeship agreement.
- 1) For electrical trades, the apprentice may not miss more than two (2) related training classes in any quarter.
 - 2) For pipe trades and automotive trades, the apprentice may not miss more than two (2) related training classes, or a single unexcused absence, in any academic year.

For L&I Staff Use OnlyReceived: L&I Tukwila, 2A
July 25, 2023 *SKH*

L&I Apprenticeship Consultant

Teri Gardner 8-11-23

L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530**Apprenticeship
Related/Supplemental
Instruction (RSI) Plan Review**

Program Name City of Seattle, Washington Apprenticeship Committee	
Occupation Heavy Duty Mechanic	
Term/OJT Hours 8000	Total RSI Hours 587
Training Provider Machinists Institute	

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprentice and assures that:

1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliances with WISHA and applicable federal and state regulations.
4. The RSI Plan is maintained, updated and submitted to the Department a minimum of once every 5 years (WSATC Policy 2015-01; rev, 10-21-21).
5. The RSI will be conducted by instructors who meet the qualification of the "competent instructor" as described in WAC 296-05-003:
 - a. Has demonstrated a satisfactory employment performance in her/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
 - b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
 - c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
6. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, instruction shall be clearly defined.

Signatures on next page

Form must be signed by Committee Chair and Secretary or Program's Authorized Signer

☐ Chair	Date	☐ Secretary	Date
☒ Authorized Signer	4/13/2023		
Print Name: Lisa Reager		Print Name:	
Signature: 		Signature:	

Training Provider Signature

Approved By (Print Name): Shana Peschek	Title: Executive Director
Signature of the Training Provider: 	
Date: 4/14/23	

If additional training providers are needed, go to page 4.

SBCTC

Print Name:	Title:
Signature of the Program Administrator:	
Date:	
☐ SBCTC recommends approval ☐ SBCTC recommends return to sponsor	

Program Name City of Seattle, Washington Apprenticeship Committee	Occupational Objective Heavy Duty Mechanic
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Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of Element/Course" field.

Describe minimum hours of study per year in terms of (check one):

- ☒ 12-month period from date of registration.
☐ Defined 12-month school year.
☐ 2,000 hours of on-the-job training.

Year 1 (144 hours)

Element/Course: Automotive Service Technician Safety and Tools	Planned Hours: 38
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: An overview of shop safety theory, hand & power tools, lifting basics, and precision measurement and theory. Includes pre- and post-tests in application of safe practices and tool use. Training includes, but not limited to, proper use of personal protective equipment, hand safety & ergonomics, winch safety, electrical safety and hearing conservation. Lab 20 hours Online hours 18	

Element/Course: Tool Basics	Planned Hours: 20
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Introduction to common tools (ammeters, gauges, jack stands, torque wrenches, etc.). Math techniques, including measurements/calculations/conversions. Lab hours 10 Online hours 10	

Element/Course: Basic Employment Skills	Planned Hours: 8
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Instruction/overview of acceptable employee standards including timeliness, ability to take direction, task completion, appropriate communication styles, and personal appearance, as well as honesty, integrity, and reliability. Lab hours 4 Online hours 4	

Element/Course: Basic Communication Skills	Planned Hours: 8
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Techniques for effective communication in the workplace. Includes lessons that emphasize importance of verbal, written and reading skills in the trades. Classroom hours 4 Online hours 4	

Element/Course: Introduction to Trade Math	Planned Hours: 10
Mode of Instruction (check all that apply) ☒ Classroom ☐ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Review of basic math skills related to the trades and demonstration of how they apply in context. Covers multiple systems of measurement, decimals, fractions, and basic geometry. Classroom hours 5 Online hours 5	

Element/Course: Engine Mechanical Basics	Planned Hours: 22
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Basic introduction to engines. Topics include engine block, crankcase, pistons, bore/stroke, flywheel, camshaft, timing belts and manifold/exhausts, safety and industrial hygiene considerations. Lab hours 11 Online hours 11	

Element/Course: Fuel Systems	Planned Hours: 19
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Covers the basics of diesel fuel systems. Topics include tanks, filters, fuel transfer pumps, injection pumps and injection nozzles, Safety Data Sheets and safe handling information. Lab hours 10 Online hours 9	

Element/Course: Cooling Systems	Planned Hours: 19
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Covers the essential components of cooling systems including water pumps, thermostats, cooling fans, radiators, hoses and coolants, SDS and safe handling information. Lab hours 10 Online hours 9	

Year 2 (151 hours)

Element/Course: Electrical	Planned Hours: 47
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Electrical fundamentals including calculations using Ohm's Law; AC/DC voltage; the use of voltmeters, ohm meters, ammeters and multimeters; electrical components including resistors, coils, capacitors and diodes, electrical safety. Lab hours 24 Online hours 23	

Element/Course: Diesel Mechanical Basics	Planned Hours: 24
Mode of Instruction (check all that apply)	

☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute
Description of element/course: Introduction to diesel systems including the diesel engine, diesel engine support systems, and the exhaust system. Also includes an overview of the diesel cycle, and a short history of the diesel engine, safety and industrial hygiene considerations. Lab hours 12 Online hours 12

Element/Course: Scavenging Systems	Planned Hours: 8
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Covers two stroke and four stroke cycles. Also discusses the impact on the environment, chemical safety, and SDS. Lab hours 4 Online hours 4	

Element/Course: Lubrication Systems	Planned Hours: 12
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Covers types of lubrication and lubricating oil, oil pumps, filters, oil coolers and pressure sensors. Lab hours 6 Online hours 6	

Element/Course: Welding I	Planned Hours: 30
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Oxy-acetylene welding and cutting; and shielded-metal arc welding; safety and special PPE. Lab hours 30	

Element/Course: Welding II	Planned Hours: 30
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Machinists Institute	
MIG and flux-cored welding; safety and special PPE. Lab hours 30	

Year 3 (148 hours)

Element/Course: Welding III	Planned Hours: 40
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☐ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Tungsten Inert Gas welding; safety and special Personal Protective Equipment Lab hours 40	

Element/Course: Computer Applications	Planned Hours: 20
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	

Description of element/course:

Computer system basics, control fundamentals, sensors, and output devices. Depending upon employer needs, could incorporate proprietary system training (e.g. DiagnosticLink).

Lab hours 10

Online hours 10

Element/Course: Pneumatic Systems

Planned Hours: 18

Mode of Instruction (check all that apply)

☐ Classroom ☒ Lab ☒ Online ☐ Self-Study

Provided by: Machinists Institute

Description of element/course:

Covers air brakes, compressors, actuators and control valves; pneumatic safety.

Lab hours 9

Online hours 9

Element/Course: Compressors

Planned Hours: 10

Mode of Instruction (check all that apply)

☐ Classroom ☒ Lab ☒ Online ☐ Self-Study

Provided by: Machinists Institute

Description of element/course:

Overview of compressor components. Also covers repair/maintenance and troubleshooting, pressurized container safety.

Lab hours 5

Online hours 5

Element/Course: Heavy Equipment Repair/Maintenance

Planned Hours: 18

Mode of Instruction (check all that apply)

☐ Classroom ☒ Lab ☒ Online ☐ Self-Study

Provided by: Machinists Institute

Description of element/course:

Introduction to the repair and maintenance of heavy equipment systems. This course can be customized depending on type of equipment being serviced.

Lab hours 9

Online hours 9

Element/Course: Winch and Hoist Repair/Maintenance

Planned Hours: 18

Mode of Instruction (check all that apply)

☐ Classroom ☒ Lab ☒ Online ☐ Self-Study

Provided by: Machinists Institute

Description of element/course:

Overview of winch and hoist components. Also covers repair/maintenance and troubleshooting, safe use of equipment.

Lab hours 9

Online hours 9

Element/Course: Hydraulics

Planned Hours: 24

Mode of Instruction (check all that apply)

☐ Classroom ☒ Lab ☒ Online ☐ Self-Study

Provided by: Machinists Institute

Description of element/course:

Basic hydraulic principles, and types of hydraulic fluids and their characteristics. Describes components of hydraulic systems including pumps, motors, valves, seals, cylinders, and filters as well as maintenance procedures, SDS, and industrial hygiene.

Lab hours 12

Online hours 12

Year 4 (144 hours)

Element/Course: Power Trains

Planned Hours: 10

Mode of Instruction (check all that apply)

☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute
Description of element/course: Covers engine block types, mechanical components, pistons/cylinders, crankcase/crankshaft/camshaft, timing systems, belts, and manifolds, safety and industrial hygiene. Lab hours 5 Online hours 5

Element/Course: Clutch Service	Planned Hours: 20
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Covers clutch discs, bearings, driveshafts, synchronizers and differentials as well as service and maintenance procedures, safety and industrial hygiene. Lab hours 10 Online hours 10	

Element/Course: Driveline Service	Planned Hours: 30
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Covers drive shafts, axles, U joints and CV joints as well as service and maintenance procedures and safety. Lab hours 15 Online hours 15	

Element/Course: Transmission Service	Planned Hours: 44
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Preventative maintenance and service procedures for transmissions. Includes coverage of mechanical interfaces, electrical connections, and diagnostic systems; SDS and chemical safety. Lab hours 22 Online hours 22	

Element/Course: Wheel End Service	Planned Hours: 10
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Covers wheel positions, inclination, camber/caster, toe/thrust angle and alignment. Also covers service and maintenance procedures, safe working habits. Lab hours 5 Online hours 5	

Element/Course: Suspension Systems	Planned Hours: 30
Mode of Instruction (check all that apply) ☐ Classroom ☒ Lab ☒ Online ☐ Self-Study Provided by: Machinists Institute	
Description of element/course: Review of suspension components including linkages, bearing shaft seals, bearings and axles, safe working habits. Lab hours 15 Online hours 15	

Additional Training Providers (if necessary)

Click or tap here to enter text.

Print Name Training Provider

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Title of Training Provider

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