

Received: L&I Tukwila  
September 9, 2020

Received: L&I Tukwila  
August 29, 2020

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



# REQUEST FOR REVISION OF STANDARDS

*Sandra K. Husband*  
L&I apprenticeship coordinator

TO: Washington State Apprenticeship & Training Council

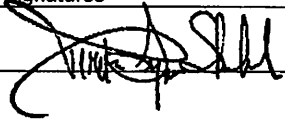
From: Aerospace Joint Apprenticeship Committee - 1828  
(NAME OF PROGRAM STANDARDS)

*Teri Gardner 9-10-2020*

Please update our Standards of Apprenticeship to reflect the following changes.  
Additions shall be underlined.  
Deletions shall be ~~struck through~~.  
See attached.

*Teri Gardner 8-31-2020*

Authorized signatures

(chr.) 	Approved by: Washington State Apprenticeship & Training Council
(sec.)	Secretary of WSATC:
date: 7/27/20	date:

attach additional sheets if necessary

# Aerospace Joint Apprenticeship Committee - 1828

Cover Page

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Occupational Objective(s):

**SOC#**

**Term[WAC 296-05-015]**

**Industrial Machine Operator**

**51-9111.00**

**3,000 HOURS**

*Teri Gardner 9-10-2020*

IV. Term of Apprenticeship:

- A. **The term of the Industrial Manufacturing Technician and Industrial Machine Operator will be 3,000 of reasonably continuous employment.**

V. Initial Probationary Period:

1. **The Initial Probationary Period for the Industrial Manufacturing Technician and the Industrial Machine Operator is the first 600 hours of employment as an apprentice.**

VII. Apprentice Wages and Wage Progression:

C. Wage progression Schedules

**Industrial Machine Operator**

Step	Hour Range or competency step	Percentage of journey-level wage rate*
<b>1</b>	<b><u>0000 – 1000 hours</u></b>	<b><u>85%</u></b>
<b>2</b>	<b><u>1001 – 2000 hours</u></b>	<b><u>90%</u></b>
<b>3</b>	<b><u>2001 – 3000 hours</u></b>	<b><u>95%</u></b>

**Plus applicable fringe benefits.**

VIII. Work Processes:

**L. Industrial Machine Operator**

**Approximate Hours**

- |  |                    |
|--|--------------------|
| <b>1. <u>Manufacturing Basics &amp; Safety</u>.....</b>                        | <b><u>500</u></b>  |
| <b>2. <u>Manufacturing Equipment Setup &amp; Production Processes</u>.....</b> | <b><u>1400</u></b> |
| <b>3. <u>Quality Assurance Basics</u>.....</b>                                 | <b><u>800</u></b>  |
| <b>4. <u>Preventative &amp; Predicative Machine Maintenance</u>.....</b>       | <b><u>300</u></b>  |

**Total Hours: 3,000**

**The above schedule of practical work experience is designed as a guide. The Apprentice shall be instructed and trained in all operations and methods customarily used in their trade. Each shop will adhere to as closely as facilities will permit and as approved by the Apprenticeship Committee. Retention of the apprentice on a particular operation beyond the established time should not occur unless there is a definite need for further training in the process. Refer to the apprentice work progress record for additional information related to specific work processes.**

# Aerospace Joint Apprenticeship Committee - 1828

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## IX. Related/Supplemental Instruction:

### C. Additional Information:

*Teri Gardner 9-10-2020*

**5. 300 hours of RSI over the course of their apprenticeship for Industrial Manufacturing Technician and Machine Operator.**

## XI. Sponsor – Responsibilities and Governing Structure:

### E. Committee governance (see WAC 296-05-009):

1.

#### c. The employer representatives shall be:

**Tim Rabe, Secretary Chair**

~~**Mike Robison  
Machinist Inc.  
500 S. Portland St.  
Seattle, WA 98108**~~

**Dave Trader  
Workforce Development Center  
11400 Airport Road, Suite 100  
Everett, WA 98204**

#### d. The employee representatives shall be:

~~**Tom Lux, Chair  
9125 15<sup>th</sup> Pl. South  
Seattle, WA 98108**~~

**Richard Jackson  
IAMAW #751  
9125 15<sup>th</sup> Pl. South  
Seattle, WA 98108**

**Jesse Cote, Jr., Secretary**

~~**Bobby Joe Murray  
9135 15<sup>th</sup> Place S.  
Seattle, WA 98108**~~

**Tommy Hunt  
IAM #160  
9135 15<sup>th</sup> Place S.  
Seattle, WA 98108**

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## Journey Level Wage Rate

From which apprentices' wages rates are computed

TO: Washington State Apprenticeship & Training Council

*Teri Gardner 8-31-2020*

From Aerospace Joint Apprenticeship Committee - 1828  
(NAME OF STANDARDS)

Occupations	County(s)	Journey Level Wage Rate	Effective Date:
Industrial Machine Operator	Yakima	\$19.00	07/27/2020

# Apprenticeship Related/Supplemental Instruction (RSI) Plan Review

Program Sponsor Aerospace Joint Apprenticeship Committee	
Skilled Occupational Objective Industrial Machine Operator	
Term/OJT Hours 3,000	Total RSI Hours 300
Training Provider Aerospace Joint Apprenticeship Committee	

*Teri Gardner 8-31-2020*

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprenticeship 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 compliance with WISHA and applicable federal and state regulations.


Demetria L Strickland  
Printed Name of Program Sponsor

  
Signature of Program Sponsor

By the signature placed below, the **training provider** assures that:

1. The RSI will be conducted by instructors who meet the qualifications of "competent instructor" as described in WAC 296-05-003.
  - a. Has demonstrated a satisfactory employment performance in his/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.
2. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, such instruction is clearly defined.

Demetria L Strickland  
Print Name Training Provider

  
Signature of Training Provider

Training Coordinator  
Title of Training Provider

Aerospace Joint Apprenticeship Committee  
Organization of Training Provider

*If there are additional training providers, please provide information and signatures on the next page.*

**Additional Resources:** [Apprenticeship Related Supplemental Instruction \(RSI\) Plan Review Glossary of Term \(F100-519-000\)](#) and [Apprenticeship Related Supplemental Instruction \(RSI\) Plan Review Criteria \(F100-521-000\)](#).

**SBCTC Program Administrator** has reviewed RSI plan and recommendations of the Trade Committee.

Click or tap here to enter text.  
Print Name of SBCTC Program Administrator      Signature of SBCTC Program Administrator      Date

- SBCTC recommends approval       SBCTC recommends return to sponsor

## Additional Training Providers (if necessary)

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

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Organization of Training Provider

Program Sponsor: Aerospace Joint Apprenticeship Committee	Skilled Occupational Objective: Machine Operator
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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.

<b>Element/Course:</b> Safety & Sanitation	<b>Planned Hours:</b> 50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> Aerospace Joint Apprenticeship Committee	
Description of element/course: This course introduces the concepts of working in a safe and productive food manufacturing workplace. Apprentices explain important OSHA safety standards as well as standard operating procedures to ensure proper sanitation. They also demonstrate understanding of how to keep allergens, metals, and other harmful substances out of the food supply. Apprentices practice FDA's Hazard Analysis Critical Control Point (HACCP) principles to identify, evaluate, and control food safety hazards in their workplace. Finally, apprentices recognize Good Manufacturing Processes (GMPs) and how they relate to food safety.	

<b>Element/Course:</b> Industrial Maintenance & Mechatronics 1	<b>Planned Hours:</b> 50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> Aerospace Joint Apprenticeship Committee	
Description of element/course: This is the first of two courses that explores the foundational principles and skills of industrial machine maintenance as it relates to a machine operator. Apprentices learn predictive and preventative maintenance and troubleshooting strategies for machine repair. They focus on methodologies such as 5 why and root cause analysis to isolate problems and determine the most effective troubleshooting strategies. Students describe the elements of and physical principles behind mechanical, fluid power, pneumatic systems, electrical systems and how to interpret technical drawings related to these systems. Some of the mechanical systems students learn about include belts and pulleys, chains, and gears, and conveyor systems. Apprentices will also explain the fundamentals aspects of safety related to electrical circuits.	

<b>Element/Course:</b> Industrial Maintenance & Mechatronics 2	<b>Planned Hours:</b> 50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> Aerospace Joint Apprenticeship Committee	
Description of element/course: This is the second of two courses that explores the foundational principles and skills of industrial machine maintenance as it relates to the machine operators. Apprentices learn about mechanical rigging and installation, including safety, installation, and ways to perform lifts. They describe elements of electronic control systems, including diodes, transistors, and integrated circuits. They demonstrate knowledge of the main components, programming, and maintenance of Programmable Logic Controllers (PLCs) and Human-Machine Interfaces (HMIs). Finally, apprentices explore concepts related to maintenance repair welding, and learn the fundamentals of sanitary design.	

<b>Element/Course:</b> Quality Assurance & Inspection	<b>Planned Hours:</b> 50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> Aerospace Joint Apprenticeship Committee	
Description of element/course: In this course, apprentices develop an understanding of the functions of a Quality Assurance (QA) system. They identify the elements of QA systems and how they support safe food manufacturing processing. They learn the purpose of food safety and quality practices and strategies. Apprentices identify major food safety regulations and how they impact food manufacturing processing. They also review the elements of a Hazard Analysis Critical Control Point (HACCP) system and its seven principles. Students apply the standard technical and analytical occupational skills, including process monitoring, product inspection and evaluation, sampling plans, and sensory evaluation. Apprentices learn to identify food safety issues, troubleshooting strategies, and corrective actions.	

<b>Element/Course:</b> Material Science (Perishable/Non-Perishable)	<b>Planned Hours:</b> 50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> Aerospace Joint Apprenticeship Committee	
Description of element/course: This course explores the relationship between the basic principles of science and the safe manufacturing of food products. Apprentices gain an understanding of food science to learn how it applies to their day-to-day jobs. They explain the foundational principles of food chemistry, food microbiology, and food physics and how they relate to food production. Apprentices also study the role of pH in the manufacture of food. They describe the effects of helpful and harmful microorganisms on the food supply and provide examples of food preservation using heat and cold, dehydration and concentration, and irradiation. Apprentices also demonstrate knowledge of the mixing and separating techniques used in food processing. Apprentices will also gain knowledge of what types of food grade materials are used in food production to maintain good safety and sanitation.	

<b>Element/Course:</b> Food Manufacturing Technology	<b>Planned Hours:</b> 50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> Aerospace Joint Apprenticeship Committee	
Description of element/course: This course explores the changing world of food manufacturing technology and helps students apply what they learn to a food-processing environment. Apprentices describe packaging, filling, sealing, boxing, labeling, and robotic sorting and palletizer systems. They also explore the fundamental ways to operate and maintain them. Apprentices gain an understanding of technologies in food production preservation, including sterilization, pasteurization, chilling, freezing, and dehydration, as well as emerging technologies in the food processing industry.	