

Career Guidance

Teachers often provide glimpses into career paths for their students, through class lessons, or in one to one advisement. These career guidance materials are included to provide the first steps to pursuing construction education, after graduating from high school. They can be used directly by the instructor, or shared with a counselor. Please note: we recommend you keep the career guidance materials with the toolbox, as quantities of support materials are limited.

In this section:

- Construction & Trades Career “Tree” and the Construction & Apprenticeship Trades Career “Forest” graphics
- Community and Technical College Training Matrix, with contact directory
- Apprenticeship program contact information, by region
- Construction Trades Job Descriptions, including academic and entrance requirements



In back pocket of Toolbox binder:

The career planning book, “Where Are You Going?” is produced by the Washington State Workforce Training and Education Coordinating Board, and is designed to help students locate the kind of training they will need to get into the career they want.

The DVD, “Apprenticeship: The Original Four-Year Degree” is produced by the Washington State Building and Construction Trades Council, and shows a range of apprenticeships located in state.

The brochure, “Hot Jobs, Cool Careers” is produced by the Associated General Contractors of Washington Education Foundation, and provides a broad overview of the many jobs available in the diverse industry of construction.

Used with construction math, these materials can help teachers:

- Contact colleges and apprenticeships directly for guest instructors, field trips, or to develop articulations
- Tailor the Construction Math Lesson Packages to their own teaching style and needs
- Brainstorm team teaching experiences with CTE construction teachers
- Use as visual cues to explain how and why math is important in construction

Additional resources for your classroom can be obtained through the Construction Center of Excellence’s website, at www.rtc.edu/CommunityResources/CCE.



Hot Jobs, Cool Careers – Construction Education in Washington State

Community and Technical Colleges

There are many fulfilling careers in construction that offer prestige and financial reward. It is a common misperception that a person can enjoy career mobility in construction without training; this is simply not the case. It is critical to advise students interested in construction to consider post-secondary education options.

The “Two Year Colleges Offering Construction Programs” grid on page X shows construction education offered at Washington State community and technical colleges. Most of the programs in this chart lead to an associate’s degree, and/or transfer to a four-year university program. Page X is a directory of college contact information, including websites, for enrollment and specific program questions.

Construction and Building Trades Apprenticeships

Entering a registered apprenticeship is equivalent in time and academic rigor to earning a baccalaureate degree. In Washington State, you can earn an associates’ degree while enrolled in an apprenticeship, and many building trades professionals can go further in specialty or university-level programs later in their career.

Applicants must show in their academic transcripts or through college pre-tests competency in math and science to be accepted into a program. There are some distinct advantages to entering an apprenticeship. First, most, if not all, of an apprentice’s program is paid for by a trust fund. Second, an apprentice earns a competitive salary plus benefits while enrolled in their program, with regular raises. An apprentice doesn’t need a side job to pay their college bills!

Some apprenticeships are co-located on community and technical college campuses; others are located on independent campuses throughout Washington. The “Apprenticeships Co-Located at Colleges” grid on page X and the regional apprenticeship directory on page X show where these programs are located.

The Washington State Department of Labor and Industries Apprenticeship Division offers step-by-step instructions to plan and apply for the apprentice profession you wish to pursue at: <http://www.lni.wa.gov/TradesLicensing/apprenticeship/default.asp>.

Construction & Trades

Career Tree

August 2006

Advanced Degree
(6 - 8 years)
\$44,000 - \$81,000 per year

Architects (p. 35)
Cartographers (p. 96)
Urban and Regional Planners (p. 61)

Bachelor's Degree
(4 - 5.5 years)
\$30,000 - \$114,000+ per year

Civil Engineers (p. 97)
Commercial & Industrial Designers (p. 85)
Construction Managers* (p. 36)

Cost Estimators* (p. 36)
Electricians* (p. 37)
Industrial Engineers* (p. 98)
Surveyors (p. 40)

Associate's Degree
(2 - 3.5 years)
\$20,000 - \$68,000 per year

Building Maintenance Workers (p. 35)
Carpenters (p. 35)
Commercial Divers (p. 36)
Construction Helpers (p. 36)
Drafters* (p. 36)
Electrical & Electronics Installers & Repairers*

Electricians (p. 37)
Heating & Cooling System Mechanics* (p. 38)
Industrial Engineering Technicians*
Sheet Metal Workers* (p. 39)
Operating Engineers/
Equipment Operators* (p. 38)

Surveying & Mapping Technicians* (p. 100)
Welders, Cutters, Solderers, & Brazers* (p. 88)

Short-Term or On-the-Job Training
(2 - 22 months)
\$17,000 - \$70,000 per year

Cabinetmakers (p. 35)
Construction & Building Inspectors* (p. 36)
Construction Laborers*
Construction & Well Drillers (p. 36)
Crane & Tower Operators (p. 36)
Explosives Workers (p. 37)

Fiberglass Laminators & Fabricators*
General Construction Workers (p. 37)
Hazardous Materials Removal Workers* (p. 60)
Line Installers & Repairers (p. 38)
Maintenance & Repair Workers, General*

Paving Equipment Operators (p. 39)
Pipelayers (p. 39)
Septic Tank Services and Sewer Pipe Cleaners (p. 39)

Foundations for Success

Math English Science

Page numbers listed after job titles correspond with "Where are you going? A guide to careers and education in Washington State," by the Washington State Workforce Training and Education Coordinating Board, 2005.
Job titles followed by asterisks (*) represent the "Demand Occupations in Snohomish County" - <http://www.witna.org/wideswdata/tea.asp?area=00004>
Job titles and salary information obtained from the following sources: America's Career InfoNet - www.acinet.org/acinet/; Construction Industries Careers and Training QuickList; Snohomish County Workforce Development Council - www.worksourceonline.com; Washington's Interactive Labor Market Access - www.witna.org/; Washington State Registered Apprenticeship Programs Catalog; Washington State Workforce Training and Education Coordinating Board - www.wtba.wa.gov/

The Snohomish County Workforce Development Council is an equal opportunity employer and provider of employment and training services. Auxiliary aids and services are available upon request to persons with disabilities.



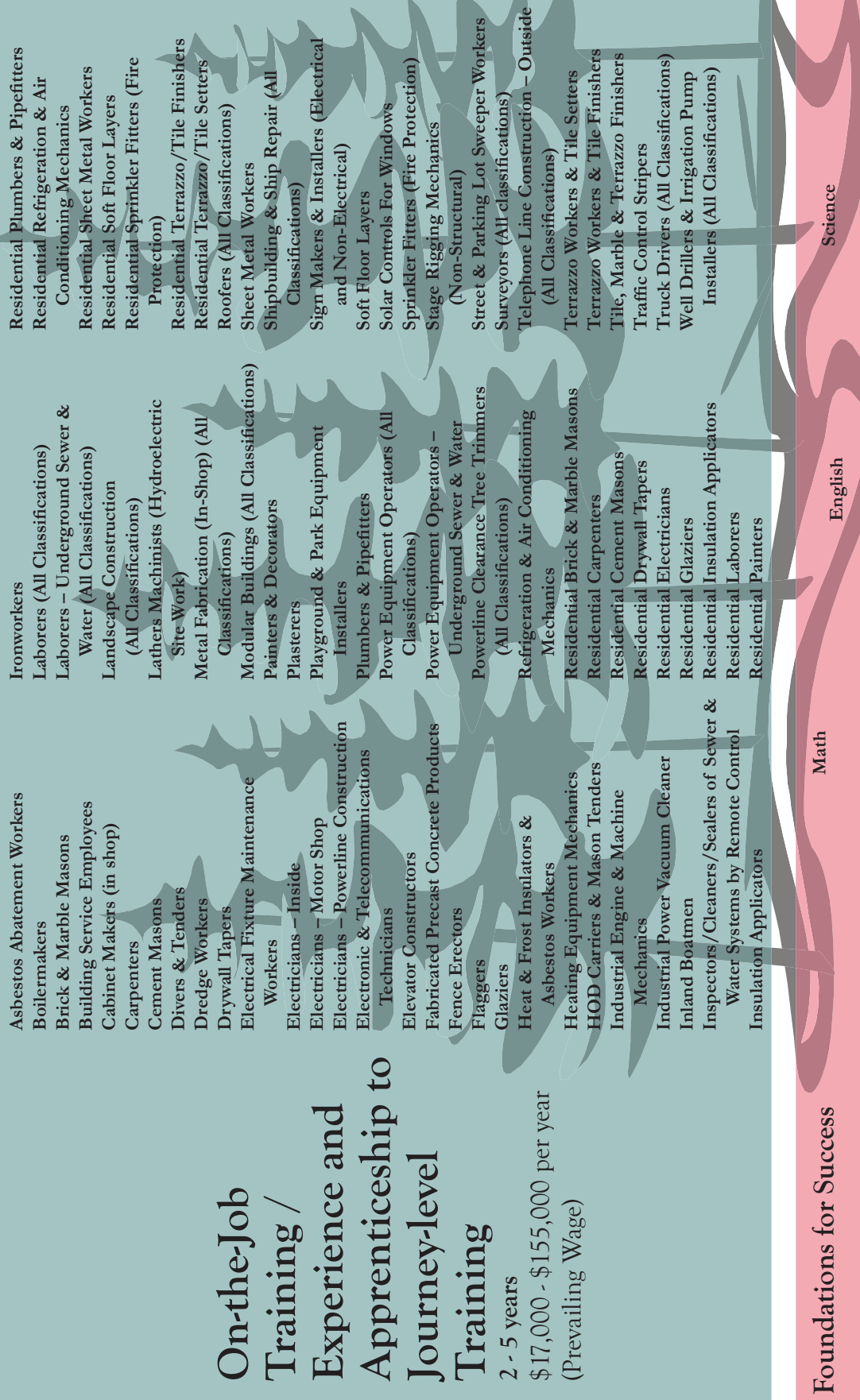
Construction Apprenticeship & Trades

Career Forest

August 2006

**On-the-Job
Training /
Experience and
Apprenticeship to
Journey-level
Training**

2 - 5 years
\$17,000 - \$155,000 per year
(Prevailing Wage)



Job titles and prevailing wage information are from the WA. State Registered Apprenticeship Programs Catalog, pages 12-13 - <http://www.lni.wa.gov/TradesLicensing/Apprenticeship/files/pubs/appcat.pdf>

The Snohomish County Workforce Development Council is an equal opportunity employer and provider of employment and training services. Auxiliary aids and services are available upon request to persons with disabilities.

WORKSource
Snohomish County

CONSTRUCTION PROGRAMS AT TWO-YEAR COLLEGES

COLLEGES			Bates	Bellingham	Bellevue	Big Bend	Centralia	Clark	Clover Park	Columbia Basin	Edmonds	Everett	Grays Harbor	Green River	Highline	Lake Washington	Lower Columbia	North Seattle	Olympic	Pierce	Peninsula	Renton	Seattle Central	Seattle Vocational	Skagit Valley	So. Puget Sound	South Seattle	Spokane	Tacoma	Walla Walla	Wenatchee Valley	Yakima Valley
CONSTRUCTION PROGRAMS AT TWO-YEAR COLLEGES	APARTMENT & CONDOMINIUM MAINTENANCE																															
	APPLIANCE INSTALLATION & REPAIR																															
	ARCHITECTURAL, BUILDING CONSTRUCTION OR CIVIL ENGINEERING DESIGN																															
	CONSTRUCTION MANAGEMENT & TECHNOLOGY - INSPECTION																															
	CABINETMAKING & MILLWORK																															
	CARPENTRY																															
	CUSTODIAL/BUILDING SERVICES																															
	COMPUTER AIDED DRAFTING & DESIGN TECHNOLOGY																															
	ELECTRICIAN/LINEWORKER																															
	ENVIRONMENTAL ENGINEERING TECHNICIAN																															
	HEATING, AC, VENTILATION & REFRIGERATOR MAINTENANCE																															
	INTERIOR DESIGN																															
	LANDSCAPING & GROUNDSKEEPING																															
	MARINE CARPENTRY																															
	OCCUPATIONAL SAFETY & HEALTH TECHNICIANS																															
	PRE-APPRENTICESHIP																															
	REAL ESTATE																															
	RESIDENTIAL CONSTRUCTION/HOMEBUILDING																															
	SHEET METAL TECHNICIAN																															
	SURVEY TECHNICIAN																															
WATER RESOURCES/WATER QUALITY & WASTEWATER MANAGEMENT																																
WELDING TECHNICIAN																																



Community and Technical Colleges offering construction-related training programs

Refer to the grid on page 143 for offerings. Check with the individual college for program details.

Bates Technical College

1101 S. Yakima Avenue
Tacoma, WA 98405-4895
253.680.7000
TDD: 253.680.7045
<http://www.bates.ctc.edu>

Bellingham Technical College

3028 Lindbergh Avenue
Bellingham WA 98225-1599
360.752.7000
TDD: 360.752.8515
<http://www.btc.ctc.edu>

Bellevue Community College

3000 Landerholm Circle S.E.
Bellevue, WA 98007-6484
425.564.1000
TDD:
<http://www.bcc.ctc.edu>

Big Bend Community College

7662 Chanute Street
Moses Lake, WA 98837-3299
509.793.2222
TDD: 360.807.6227
<http://www.bigbend.edu>

Centralia College

600 W. Locust Street
Centralia, WA 98531-4099
360.736.9391
TDD:
<http://www.centralia.ctc.edu>

Clark College

1800 E. McLoughlin Blvd.
Vancouver, WA 98663-3598
360-992-2000
TDD: 360.992.2835
<http://www.clark.edu>

Clover Park Technical College

4500 Steilacoom Blvd. S.W.
Lakewood, WA 98499-4098
253.589.5800
TDD: 253.589.5834
<http://www.cptc.edu>

Columbia Basin College

2600 N. 20th Avenue
Pasco, WA 99301-3379
509.547.0511
TDD:
<http://www.cbc2.org>

Edmonds Community College

20000 68th Avenue W.
Lynnwood, WA 98036-5999
425.640.1500
TDD/TTY: 425.774.8669
<http://www.edcc.edu>

Everett Community College

2000 Tower Street
Everett, WA 98201-1390
425.388.9100
TDD: 425.388.9438
<http://www.everettcc.edu/>

Grays Harbor College

1620 Edward P. Smith Drive
Aberdeen, WA 98520
360.532.9020
TDD: 360.538.4223
<http://ghc.ctc.edu>

Green River Community College

12401 S.E. 320th Street
Auburn, WA 98092-3699
253.833.9111
TDD: 253.288.3359
<http://www.greenriver.edu>

Highline Community College

2400 S. 240th Street
Des Moines, WA 98198-9800
206.878.3710
TDD: 206.870.4853
<http://www.highline.edu>

Lake Washington Technical College

11605 132nd Avenue N.E.
Kirkland, WA 98034-8506
425.739.8100
TDD: 425.739.8109
<http://www.lwtc.ctc.edu>

Lower Columbia College

1600 Maple Street
Longview, WA 98632-0310
360.442.2000
TDD: 360.442.2344
<http://www.lcc.ctc.edu>

North Seattle Community College

9600 College Way N.
Seattle, WA 98103
206.527.3600
TDD: 206.526.0079
<http://www.northseattle.edu>

Olympic College

1600 Chester Avenue
Bremerton, WA 98337-1699
360.792.6050
TDD: 360.475.7543
<http://www.oc.ctc.edu>

Pierce College

Fort Steilacoom
9401 Farwest Dr S.W.
Lakewood, WA 98498
253.964.6500
TDD: 253.964.6228
<http://www.pierce.ctc.edu>

Peninsula College

1502 E. Lauridsen Blvd.
Port Angeles, WA 98362
360.452.9277
TDD: 360.417.6339
www.pc.ctc.edu/

Renton Technical College

3000 N.E. Fourth Street
Renton, WA 98056-4195
425.235.2352
TDD: 425.235.5811
<http://www.rtc.edu>

Seattle Central Community College

1701 Broadway
Seattle, WA 98122-9905
206.587.3800
TDD: 206.587.4183
<http://www.seattlecentral.edu>

Skagit Valley College

2405 E. College Way
Mount Vernon, WA 98273
360.416.7600
TDD: 360.416.7718
<http://www.skagit.edu>

South Seattle Community College

6000 16th Avenue S.W.
Seattle, WA 98106-1499
206.764.5300
TDD: 1-800-833-6388
<http://www.southseattle.edu>

South Puget Sound

2011 Mottman Road S.W.
Olympia, WA 98512-6292
360.754.7711
TDD: 360.596.5439
<http://www.sp SCC.ctc.edu>

Seattle Vocational

2120 South Jackson Street
Seattle, WA 98144
206-587-4950
TDD:
<http://sviweb.sccd.ctc.edu/>

Spokane Community College

1810 N. Greene Street
Spokane, WA 99217-5399
509.533.7000
TDD: 509.533.8610
<http://www.scc.spokane.edu>

Spokane Falls Community College

3410 W. Fort George Wright Drive
Spokane, WA 99224-5288
509.533.3500
TDD/TTY: 509.533.3838
<http://www.spokanefalls.edu>

Tacoma Community College

6501 S. 19th Street
Tacoma, WA 98466-6100
253.566.5000
TDD: 253.566.5319
<http://www.tacomacc.edu>

Walla Walla Community College

500 Tausick Way
Walla Walla, WA 98362-9267
509.522.2500
TDD: 509.527.4412
<http://www.wwcc.edu>

Wenatchee Valley College

1300 Fifth Street
Wenatchee, WA 98801-1799
509.682.6800
TDD:
<http://www.wvc.edu>

Yakima Valley Community College

1107 S. 16th Avenue
Yakima, WA 98902
509.574.4600
TDD: 509.574.4600
<http://www.yvcc.edu>

Apprenticeship Directory



SOUTHWEST WASHINGTON

Grays Harbor Area Carpenters Apprenticeship Committee

2201 South 78th Street
Building B-512
Tacoma, WA 98409
253.472.2629

Southwest Washington PipeTrades JATC Apprenticeship Committee

8501 Zenith Court NE
Lacey, WA 98516
360.486.9400

City of Tacoma – Water Division Apprenticeship Committee Water Department

3628 South 35th Street
Tacoma, WA 98411-0007
253.396.3130
www.ci.tacoma.wa.us

IBEW Local Union #76/Southwest Washington Chapter N.E.C.A. Apprenticeship Committee

3049 South 36th
Suite 101
Tacoma, WA 98409
253.475.1192
www.ibew76.org

IBEW Local Union 76

3049 South 36th Street, Suite 101
Tacoma WA 98409
253.475.1190

Southwest Washington Electrical JATC

3001 S. 36th Street
Tacoma WA 98409
1.888.276.1707
253.475.2922
<http://www.swwaejatc.org/>
Washington

Georgia Pacific and the AWPPW Local # 5 Apprenticeship Committee

NE 4th and Adams
Camas, WA 98607
360.817.2157

Cowlitz & Wahkiakum Electrical JATC

1145 Commerce Avenue
Longview, WA 98632
360.425.3550

Pacific NW Ironworkers & Employers #86 JATC

Located at: Bates Community
College/South Campus
2201 South 78th Street
Tacoma, WA 98405
206.244.2993

Seattle/Tacoma Millmen & Cabinet Makers

Located at: Bates Technical College
College/Down Town Campus
1101 South Yakima Avenue
Tacoma, WA 98405
253.627.4094

South Puget Sound Carpenters JATC

Located at: Bates Technical
College/South Campus
2201 South 78th Street
Tacoma, WA 98405
253.472.2629

**Western Washington Painting,
Decorating & Drywall**

Located at: Bates Technical
College/South Campus
2201 South 78th Street
Tacoma, WA 98405
206.762.8332

**Operating Engineers Regional
Training**

Offered at: Bates Technical College
Heavy Duty Repairman
2201 South 78th Street
Tacoma, WA 98405
800.333.9752

Apprenticeship Directory



NORTHWEST WASHINGTON

King County Carpenters Apprenticeship Committee King County Carpenters Training Center

Located at: Renton Technical College,
Building L
3000 NE Fourth Street
Renton WA 98056
425.235.2465

Heat & Frost Insulators/Asbestos Workers

Located at: Renton Technical College,
Building E
3000 NE Fourth Street
Renton WA 98056
425.235.7827

Western Washington Plasters Apprenticeship Committee

Located at: Renton Technical College
Building E
3000 NE Fourth Street
Renton WA 425.235.7879

Millwrights

Located at: Renton Technical College
3000 NE 4th Street, Building L
Renton, WA 98056
425.235.2465

Construction Industry Training Council of Washington (CITC)

1930 116th Avenue NE
Suite 201
Bellevue, WA 98004
425.452.1950
www.citcwa.com

Western Washington Lathing, Acoustical & Drywall Systems & Thermal Insulation Installers (LADS)

20424 72nd Avenue S
Kent, WA 98032
253.437.5235

Millwrights & Pile Drivers Specialty Training Center

20424 72nd Avenue S.
Kent WA 98032
253.437.5235

Seattle Area Plumbers and Housing Plumbers, Pipefitters, Refrigeration and Marine Pipefitters Apprenticeship Committee Seattle Area Pipe Trades Education Center

595 Monster Road SW, Suite 100
Renton WA 98055-2937
425.271.5900

Roofers

2800 1st Avenue
Room 320
Seattle WA 98121-1114
425.235.2209

**Sheet Metal
Western WA Sheet Metal JATC**

Located at: Lake Washington Technical
College
13513 NE 126th Place
Kirkland, WA 98034
425.823.5737 (Eric Peterson)

Stationary Engineers

18 E. Street SW
Auburn WA 98001
253.351.0184

**West Sound Pipe Trades
Apprenticeship Committee**

1309 Highland Avenue
Bremerton, WA 98337-0114

**North Puget Sound Carpenters
Apprenticeship Committee**

401 East Hickox Road
Mount Vernon, WA 98273
360.428.2933
www.ncia.com/~npsctc

**Pile Drivers
Apprenticeship Committee**

401 East Hickox Road
Mount Vernon, WA 98273
360.428.2933
www.ncia.com/~npsctc

**Western Washington Painting,
Decorating and Drywall
Apprenticeship Committee**

6770 E. Marginal Way S.
Seattle WA 98108-3400
206.762.8332
www.apprenticeship.net

**Glaziers, Architectural, Metal & Glass
Workers**

6770 E. Marginal Way S.
Seattle WA 98108-3400
206.762.8332
www.apprenticeship.net

**Western Washington Stationary
Engineers Apprenticeship
Committee**

18 E. Street SW
Auburn, WA 98001-5268
253.351.0184
www.iuoe286.org/training.htm

**Greater Puget Sound Area Precision
Sheet Metal Apprenticeship
Committee**

7000 Highland Parkway SW
Seattle, WA 98106
206.768.7347
www.pioneersheetmetal.com
Only employees are eligible to apply

**Western Washington Sheet Metal
JATC**

13513 NE 126th Place
Kirkland, WA 98034
425.823.5737
www.wwsmjatc.org
Or
1220 Tracey Street SE
Lacey, WA 98503
360-459-9118

**Northwest Washington Pipe Trades
Apprenticeship Committee**

780 Chrysler Driver
Burlington, WA 98233
360.486.9440
www.ua26.org

Puget Sound Electrical JATC

550 SW 7th Street
Renton, WA 98055-2917
425.228.1777
<http://www.psejatc.org/psejatc.html>

**Independent Electrical Contractors
of Washington**

11630 Airport Road, Suite 300
Everett, WA 98204
800.595.0900
<http://www.iec-etf.org/>

International Union of Elevator Constructors

2112 Thorndyke Ave.
W. Seattle WA. 98199
206) 282-4885

Northwest Washington Electrical Industry JATC

306 Anderson Road
Mount Vernon, WA 98271
360.428.5080
<http://www.nwejatc.org/>

Seattle and Vicinity Sprinkler Fitters Apprenticeship Committee

2800 1st Avenue
Room 111
Seattle, WA 98121
206.441.0737
<http://www.ualocal699.org/contact.htm>

Masonry

6770 E. Marginal Way S.
Seattle, WA 98108
800.724.6837
206.762.8332

Western Washington Carpet, Linoleum & Soft Tile Layers Apprenticeship Committee

6770 E. Marginal Way S., Bldg.D
Seattle, WA 98108
800.724.6837
206.762.8332

IBEW Local Union 191

2701 Hoyt Avenue
Everett WA 98201
425.259.3195

IBEW Local Union 46

19803 62nd Avenue South
Kent WA 98032
253.395.6500

Pacific Northwest Ironworkers & Employers Local # 86 Apprenticeship Committee

4550 South 134th Place, Suite # 101
Tukwila, WA 98168
206.244.2993
www.nwiw.com

Operating Engineers

18701 120th Avenue NE, #101
Bothell, WA 98011
425.486.2273

Boilermakers

1829 Boren Avenue
Seattle, WA 98101
206.624.4707

Laborers NW Training Center

27055 Ohio Avenue
Kingston, WA 98346
1.800.554.4457

Electrical Lineworkers City of Seattle

700 5th Avenue, Suite 3300
Seattle, WA 98124-4022
206.286.1603

Cement Mason

6770 E. Marginal Way S.
Seattle, WA 98108
1.800.860.9380

Carpenters-Employers Apprenticeship & Training

Located at: Skagit Valley Community Campus
Mount Vernon Campus
2405 E. College Way
Mount Vernon, WA 98283-5899
360.428.2933

Northwest Washington Painting, Decorating and Drywall Joint Apprenticeship Committee in Seattle

Located at: Skagit Valley Community College/Mount Vernon Campus
2405 E. College Way
Mount Vernon, WA 98283-5899

Boiler Makers

Located at: South Seattle Community
College
Duwamish Apprenticeship & Education
Center
6770 East Marginal Way S.
Seattle WA 98108
206.624.4207

Cement Masons

Located at: South Seattle Community
College
Duwamish Apprenticeship & Education
Center
6770 East Marginal Way S.
Seattle WA 98108
206.762.9286

Floor Covering

Located at: South Seattle Community
College
Duwamish Apprenticeship & Education
Center
6770 East Marginal Way S.
Seattle WA 98108
253.709.4348

**Glaziers, Architectural Metal, and
Glass Workers**

Located at: South Seattle Community
College
Duwamish Apprenticeship & Education
Center
6770 East Marginal Way S.
Seattle WA 98108
206.762.7001

**Masonry Trades (Bricklayers,
Caulkers, and Tile Setters)**

Located at: South Seattle Community
College
Duwamish Apprenticeship & Education
Center
6770 East Marginal Way S.
Seattle WA 98108
206.767.3986

**Painters, Decorators, and Tapers
(Drywall)**

Located at: South Seattle Community
College
Duwamish Apprenticeship & Education
Center
6770 East Marginal Way S.
Seattle WA 98108
206.762.8332

Apprenticeship Directory



CENTRAL WASHINGTON

Central Washington Carpenters and Millmen Apprenticeship Committee LU 770

Carpenters Training Center

1720 Presson Place
Yakima, WA 98903
509.452.0320

Electrical Workers LU 112

8340 W. Gage Blvd
Kennewick, WA 99336
509.783.0589

Stationary Engineers LU 280

1305 Knight Street
Richland, WA 99352
509.946.5101

Asbestos Workers LU 82

1324 N. Cleveland
Kennewick, WA 99336
509.373.7288

A blueprint for success

Apprenticeship Directory



Eastern Washington Carpenters Apprenticeship Committee

127 East Augusta, Suite 102
Spokane WA 99207
509.532.8833
800.794.9526
www.carpenterspnwrc.org/training.htm

Carpenters Local #98

222 West Mission
Spokane, WA 99205
509.326.0900

Columbia Basin Carpenters Apprenticeship Committee

2819 West Sylvester
P.O. Box 2423
Pasco, WA 99302
509.545.1781

Spokane Community College Apprenticeship and Journeyman Training Center

2110 N. Fancher Road
Spokane Valley, WA 99220-3266
509.533.7178
www.northwestagc.net

International Union of Operating Engineers Local # 280 Apprenticeship Committee

P.O. Box 807
Spokane, WA 99352
888.577.2111

EASTERN WASHINGTON

Southeastern Washington/Northeastern Oregon Sheet Metal Workers Apprenticeship Committee

P.O. Box 2626
Pasco, WA 99301
509.547.0511

Northeastern Washington-Northern Idaho Sheet Metal Apprenticeship Committee

7209 East Trent Avenue, Suite 1
Spokane, WA 99212
509.928.5009
www.smtt.org

Inland Empire Plumbing and Pipefitting Industry Apprenticeship Training Committee

3915 East Main
Spokane, WA 99202
509.624.5258

Eastern Washington – Northeast Oregon Pipe Trades Apprenticeship Committee

1328 Road 28
Pasco, WA 99301
509.547.6480

IBEW Local Union73

1616 North Washington Street
Spokane WA 99205
509.326.2182
<http://www.ibew73.org/>

Pacific Northwest Ironworkers & Employers Apprenticeship and Training Committee Local #14

16610 East Euclid
Spokane, WA 99216
509.922.3577
www.nwiw.com/jatc14/

Spokane Home Builders Association

5813 East 4th Ave., #201
Spokane Valley, WA 99212
509.532.4990
800.216.1733
<http://www.shba.com/>

**Northwest Laborers –
Employers Training Trust**

3921 E. Francis
Spokane, WA 99217
509.467.5239
<http://nwlaborerstraining.org/>

Boilermakers Local 242

North 6404 Pittsburg
Spokane WA 99207-7598
Phone: (509) 489-1891
<http://www.bnap.com/locate/west.htm>

Western States Operating Engineers

P.O. Box 210
23500 S. Operating Engineers Lane
Spangle, WA 99031-0210
509.235.9393
<http://www.wsopen.org/>

**Eastern Washington Carpet,
Linoleum & Soft Tile Layers
Apprenticeship Committee**

District Council # 5 - Spokane
PO Box 11953
Spokane Valley, WA 99211
888.741.6422
www.apprenticeship.net/weastern.html

**Eastern Washington Painting,
Decorating and Drywall
Apprenticeship Committee
District Council # 5 - Spokane**

PO Box 11953
Spokane Valley, WA 99211
888.741.6422

Construction Teamsters LU 690/174

2410 E. St. Helens Street
Pasco, WA 99301
509.545.8297

Plumbers/Steamfitters LU 598

1328 N. 28th Avenue
Pasco, WA 99301
509.1547.6480

Associated General Contractors

4935 E. Trent
Spokane, WA 99220
509.534.0502

Bricklayers/Tilesetters

102 E. Boone
Spokane, WA 99202
509.327.2774

Carpenters

5309 E. Third
Spokane, WA
509.532.8833

Cement Masons

120 W. Mission
Spokane, WA 99201
509.326.0575

Electrical Workers

3210 E. Ferry
Spokane, WA 99202
509.534.0922

Plumbers/Steamfitters

10 W. 2nd
Spokane, WA 99204
509.624.5258

Roofers

102 E. Boone
Spokane, WA 99202
509.327.2322



BOILERMAKERS

Shop/Shipyard/Field Construction & Repair, Maintenance Boilermaker - Metal Fabricator

THE WORK

Boilermakers are complete metal fabricators who build and repair ships, fishing boats, ferries, barges, cranes, offshore drilling platforms, boilers, tanks, pressure vessels, plate and structural fabrications. Boilermakers perform welding, automatic and manual burning, blueprint reading, layout and template making, CAD (computer aided drawings), rigging, operation of mobile and stationary cranes, operation of shears, brakes, rolls, drill press, saws and all other metal fabrication equipment.

WORKING CONDITIONS

Apprentices are required to work in close and confined spaces inside boilers, vats or tanks or work in high places on top of large vessels. Workers often use acetylene torches, power grinders and other potentially dangerous equipment. The work is very hard and dirty, and heavy lifting is required. There are often periods of unemployment between jobs.

THE APPRENTICESHIP

The apprenticeship, depending upon trade, requires 6,000 -7200 hours (three to four years) of hands on training and 144-176 hours of classroom training per year. Some programs require twenty (20) on-job-training modules to be completed as the various hands on training hours are completed. Classroom instruction is usually in the evenings on your own time although some training may be at the Boilermakers National Training Center in Kansas City, Kansas. Apprentices may also be required to pass a performance-based test each year.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years, with proof such as birth certificate
- High school diploma or GED, with transcript
- Letters of recommendation
- Committee interview
- Must score 70 percent or higher on basic math test
- Willing to complete related study courses and attend classroom instruction
- Willing to abide by the standards and rules of the area apprenticeship committee
- Willing to take drug and alcohol tests annually



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



CARPENTERS

Residential/Maintenance/Painter/Industrial/Piledriver/Bridge
Mill & Cabinet Makers/Exterior-Interior Specialist

THE WORK

Carpenters work with power and hand tools. They build forms for concrete and frame buildings, walls, footings, columns and stairs. Wood framing includes house building, roofs, stairs, decking and sheathing. Carpenters install doors, windows, storefronts and handrails, build cabinets, counter tops and finished stair handrails. They also work on drywalling, wood flooring, metal jams and ceilings.

Carpenters do interior and exterior finish work, work with drywall and metal studs, install other interior systems, welding and many other related work processes. They also must read blueprints, and must measure accurately and calculate dimensions. They may be involved in the original construction or remodel of almost every kind of structure, including houses and commercial buildings, bridges, churches or factories, and highways.

WORKING CONDITIONS

The work is very physical and involves a good deal of standing, climbing, kneeling, lifting and squatting. Work is done both indoors and outdoors, depending upon the stage and nature of construction and a person's area of emphasis. Location of the job site generally changes several times during the year. You may need to travel and relocate to take an available job. One day you may work inside where it is warm and dry and the next day outside where it is cold and wet. You may work in a hole 100 feet below ground or on scaffolds ten stories above ground. You must be in good health, meet certain strength requirements, be agile and have good hand-eye coordination. Work conditions vary with each job. Some are quite strenuous, while others such as cabinetry and finish work, are very delicate and precise.

THE APPRENTICESHIP

This program, depending upon trade, requires 3000-8000 (two to four years) hours to complete and attendance at related training classes for 144-603 hours per year. Some programs schedule four one-week daytime classes for carpenters and ten winter weekends for millwrights.



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 17 years old
- Physically able to perform the work of the trade
- Sufficient education to meet trade requirements
- Have access to dependable transportation to job sites
- Complete pre-employment safety/orientation class
- Have required hand tools
- Proof of residency in your apprenticeship region
- Must pass qualifying entry exam



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



CARPET, LINOLEUM, SOFT TILE LAYERS

THE WORK

These workers install carpet, linoleum, and soft tile on floors, walls, and stairs at residential and commercial sites. This includes the preparation of the surface, measuring and calculations, cutting and fitting, and sewing (carpets).

WORKING CONDITIONS

Most work is conducted indoors. There is considerable bending, stooping, pulling, pushing and heavy lifting. Preparation and installation on outdoor surfaces is influenced by weather conditions. Periods of unemployment between jobs are common.

THE APPRENTICESHIP

This program, depending upon trade, requires 4900-7,000 hours (three to four years) of on-the-job training, and 144 hours of related classroom instruction per year, which is usually conducted in the evening on your own time.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 17 years old
- High school diploma or GED
- Read, write and speak English
- Adequate physical strength to perform the job
- Possess own transportation



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



CONSTRUCTION TEAMSTERS

THE WORK

The Washington Construction Teamsters Apprenticeship Program is a 3000-hour on-the-job training program covering a variety of Teamster Construction Equipment, including truck and pup dump trucks, belly dumps, and booms trucks. During the apprenticeship you will work on construction sites – learning the trade from qualified journey level Teamsters. Construction Teamsters work all over the state, many times in remote areas, on road construction projects, and may be away from home for extended periods of time. The work can be seasonal, (March through November) depending on the weather. Employment is somewhat different with the Construction Teamsters than in most industries. A contractor hires only enough construction hands to complete a project. Upon completion of a job, and during layoff, the apprentice must sign the out-of-work list at the union hall.

WORKING CONDITIONS

Construction Teamsters work outside in the cold, sun, rain, dirt, and snow. The work can require considerable sitting, standing, bending and reaching as well as extensive driving.

THE APPRENTICESHIP

The Washington Construction Teamsters Apprenticeship Program consists of 2,100 hours of on the job training. 144 hours of supplemental classroom instruction is also required per year. **Note:** You must attend six weeks of training at the Training Center in Pasco. During the initial training you learn the basics of the trade and prepare for the required tests to obtain a Commercial Driver's License (CDL). You are not paid for the six weeks of initial training.

APPRENTICESHIP PROGRAM REQUIREMENTS

- At least 21 years old (birth certificate or reliable proof of age)
- Be able to read and speak the English language sufficiently to talk with the general public, understand traffic signs and signals, and make entries on reports and records. Reading and language comprehension sufficient to perform the work of the Teamsters.
- Must be physically able to meet the requirements of the trade.
- Must have a valid driver's license (DOL report) with ability to obtain CDL (DOT physical).
- Applicants being accepted into the program will be required to take and pass a drug screen. (The cost of the drug screen will be paid by the JATC)



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



ELECTRICAL LINeworkERS

THE WORK

Electrical lineworkers construct and maintain electric transmission and distribution facilities that deliver electricity to our homes, factories and commercial and retail businesses. Apprentices work for various contractors on all types of power line construction, both underground and overhead.

WORKING CONDITIONS

The work is outdoors year-round and may involve extensive travel throughout the Northwest. Work on high voltage electrical transmission lines can be hazardous. Lineworkers are often called out to restore electrical service during weather emergencies when wind, snow or ice storms have damaged electric power lines.

THE APPRENTICESHIP

This program requires 6,000-8,000 hours (three to four years) of on-the-job training. Periods of unemployment may lengthen the apprenticeship. In addition, apprentices are required to attend 144-160 hours a year of related classroom studies that are provided through the apprenticeship program.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

Applicants must meet at least one of the three conditions listed below:

- Minimum age of 18 and high school diploma or GED with at least one year of high school algebra or one term of college algebra with a grade of "C" or better (official transcript required).
- Minimum age of 18 and minimum of 4,000 hours of work experience in the trade which included climbing and other trade-related work (documentation required).
- Be a veteran with two or more years of active service with other than dishonorable discharge and have completed military training including line construction and related theories (documentation required).



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



ELECTRICAL WORKERS

Wire/Substation wireman/Oil Burning/Station/Power Supply/Shop/Radio-Television Maintenance/Electronics/
Limited Residential/Lighting/Hydro/Industrial/Estimator

Electric Utility/Electrical Mechanic, Wireman/Construction/Neon & Signs/Marine Low Energy/Sound &
Communications/Meter Repairman/Electrician/Meterman/Motor Shop/Meter Technician (Electric Meter
Repairer)/Outside Electrician (Line Maintainer), Substation Electrician, Electrical Maintenance Technician

THE WORK

Construction and residential electricians work in all phases of the electrical construction and service industry. They do the electrical construction work on projects ranging from single-family residences to state-of-the-art industrial plants. Workers install conduits and wire all lighting, along with switches and converters, to complex systems incorporating computerization and high technology in the installation and maintenance of electrical systems. Their work includes both small and large commercial installation up to and including high-rise buildings. Electricians also do repair and maintenance on all electrical installations. The **low voltage/sound and communication apprenticeship** includes work processes in fiber optics, telephone systems, sound and fire alarm systems, LAN and structured wiring systems.

WORKING CONDITIONS

This work is done in the full range of environmental conditions to include outside in the dirt, cold, sun, rain, and snow; inside in climate-controlled modern offices, and in state-of-the-art clean rooms in hospitals and manufacturing plants. The work can require considerable standing, bending and reaching and may be conducted in cramped spaces or at great heights.

THE APPRENTICESHIP

These programs, depending upon trade, consist of 2,000-10,000 hours on-the-job training. Additionally, 144-216 hours of classroom instruction is required per year. Generally the additional training is conducted two nights per week.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)
(Requirements vary slightly in different regions)

- At least 18 years old (birth certificate or reliable proof of age)
- High school graduate or GED
- At least one year of high school or one quarter of post high school algebra with a grade of "C" or better (sealed high school transcript or GED scores with proof of algebra grades)



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.

- Resident of the geographical area covered by the program for one year prior to application
- Discharge papers, if applicable
- Physically able to perform work of the trade
- Must score “high” on GATB, WATB, or NJATC test (Which test depends upon the program)



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



GLAZIERS, ARCHITECTURAL, METAL AND GLASS WORKERS

THE WORK

Glaziers prepare and install various types of glass, mirrors, metal framing and glass and aluminum doors and entrances in and on buildings at residential, commercial and industrial sites. Work is often performed with other trades people on new construction, remodeling and repair jobs. Hand and power tools are used during the preparation and installation process.

WORKING CONDITIONS

Work is conducted indoors and outdoors. Although some work is done at floor level, a considerable amount of the work is conducted at great heights on ladders, rigging and scaffolding. There is considerable bending, lifting, carrying, pushing and pulling. Periods of unemployment between jobs are common.

THE APPRENTICESHIP

This program, depending upon trade, consists of 4,000-8,000 hours (two to four years) of on-the-job training and 144-447 hours of related classroom instruction per year (usually one night per week after work on your own time). Satisfactory progress must be maintained in related training classes.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years of age
- High school diploma or GED
- Read, write and speak English
- Have good physical strength
- Possess own transportation
- Valid Washington State driver's license



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



HEAT AND FROST INSULATORS AND ASBESTOS WORKERS

THE WORK

Workers in this trade apply insulation materials to pipes, tanks, boilers, ducts, refrigeration equipment and other surfaces requiring thermal control of temperatures. It requires much handling of insulation materials made of fiberglass, rubber, calcium silicate and urethane. Asbestos workers also do removal of asbestos containing materials.

WORKING CONDITIONS

The working conditions tend to be in and around dust. A variety of machinery and power tools are constantly used and workers provide their own hand tools. This trade has a high health hazard risk. Workers must wear respirators, and the proper use and care of respirators is an essential part of the work. Work is conducted in commercial buildings, refineries, ships, and industrial plants in all kinds of indoor and outdoor climates.

THE APPRENTICESHIP

This program requires 8000 hours (four years) of on-the-job training, plus 144 hours each year of related classroom training. Some programs have classroom instruction on Saturdays only, on your own time.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years old
- High school diploma or GED/equivalent
- Washington State resident with birth certificate
- Pass a physical examination
- Possess a valid state driver's license



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



IRONWORKERS

THE WORK

Workers assemble and erect steel framework and other metal parts in buildings, on bridges, dams and other steel structures. They raise, place and join steel girders and columns to form structural frameworks, including the welding of metal decking.

WORKING CONDITIONS

Ironworkers generally work outside at construction sites. Work is conducted in all kinds of weather. Ironworkers often work at great heights erecting the steel frameworks of skyscrapers, stadiums and bridges. Work can also be confined to cramped quarters. Substantial physical strength is required to carry and place the reinforcing steel for concrete structures. "Tying iron" requires heavy lifting and bending. Workers may often move to different job sites over a large region. Between jobs, there are often periods of unemployment.

THE APPRENTICESHIP

This program requires 6,000-8,000 hours (three to four years) of on-the-job training, and 240 hours of classroom instruction on your own time to qualify for the journey level examination. Subjects taught include welding, math, rigging, blueprint reading, rebar, fabrication, caulking and sealant, and structural steel.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years of age
- High school diploma or GED preferred
- Be able to read, write and speak English
- Live within the geographic area of the program
- Be drug free
- Must be able to perform the rigorous manual labor required by the trade and have a natural ability to work safely at high elevations with a good sense of balance



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



LABORERS

THE WORK

Laborers work on highway construction projects, doing clearing, grade checking, stake hopping, culvert installation, equipment signaling and traffic control. Laborers work on utility construction including excavation, shoring, pipelaying, manhole placement and construction, backfill, compaction, transferring of grades, and grade checking and measuring. In building construction and housing, laborers' work includes excavation, footing and foundations, carpenter tending, compaction, concrete placement, power and hand tools, general clean-up and mason tending (hod carrying) for brick layers. Environmental laborers do asbestos removal, hazardous waste, and radiation clean-up.

WORKING CONDITIONS

Laborers perform very physical work, digging, carrying, pulling and bending usually outside in all kinds of weather for long hours at times. They need reliable transportation and must be able to travel 70-80 miles from home to construction sites.

THE APPRENTICESHIP

The apprenticeship lasts 2 to 3 years, with 4,000 hours of on-the-job training and approximately 320 hours of classroom training at no out-of-pocket cost to the apprentice.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years of age
- Physically able to perform work of the trade
- Successful completion of pre-construction training class
- Ability to pass a drug test
- 10th grade education or equivalent



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



LATHING, ACOUSTICAL, DRYWALL AND THERMAL INSULATION

THE WORK

Lathing is a trade that is performed on both interior and exterior surfaces. Complete buildings may be framed from structural steel studs, sheeting or metal lath and made ready for plaster by the lather. Also many fancy ornamental shapes such as gothic arches, ellipses and domes are formed and shaped by the lathers' skills. Drywallers and metal stud framers use metal studs instead of wood studs. Metal studs and drywall are used almost exclusively in commercial high-rise construction because of their superior fire rating. Acoustical suspended ceilings are common in most tenant areas of high-rise buildings. Computer room floors are also done by the acoustical worker. Insulators work with both thermal and sound insulation using many variations of rolled and rigid insulation systems.

WORKING CONDITIONS

The apprentice must be able to work at great heights on scaffolding, sometimes several stories high. You must use power tools and power lifts. Work outdoors can be in all types of weather. Heavy lifting (sheets of drywall weigh up to 120 pounds) is required. Much of the work is overhead application. The apprentice must be physically strong and fit.

THE APPRENTICESHIP

This program, depending upon trade, requires 4,000-8,000 on-the-job training hours (two to four years) and an additional 144-465 of related classroom instruction.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years old (with proof of age)
- High school diploma or GED
- Pass a basic math test
- Pass a basic reading test



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



MASONRY (Bricklaying and Tilesetting)

THE WORK

Bricklayers construct walls, fireplaces, commercial buildings, schools, as well as furnaces, kilns and other structures using brick, block, stone, and marble and granite. Tilesetters install ceramic tile, marble, and granite on a variety of surfaces such as walls, floors, countertops, pools, showers, tubs, and the exterior of buildings. There are also apprenticeships available in the trades of building restoration, caulking, and terrazzo. These are specialized trades with good career potential.

WORKING CONDITIONS

Bricklayers' work is usually performed outdoors, with some work done indoors, and in all kinds of weather while Tilesetters generally work indoors. All masonry trades require good physical strength. There is considerable heavy work involving lifting and moving loads with wheelbarrows and by hand. Concrete block weigh more than brick, with 30 pounds being one of the lighter ones, and must be laid with one hand. Tile involves moving boxes of tile as well as carrying pails of mastic, and bags of thinset around the job site from one location to the next. Work sometimes requires travel to include overnight stays. There are periods of no work when the weather is bad or there is no construction going on. Building restoration and caulkers work at great heights and do a wide variety of tasks, frequently hanging off the sides of tall buildings.

THE APPRENTICESHIP

This program, depending upon trade, requires 2000-7000 hours (two to four years) of on-the-job training. Additionally, the apprentice must attend 144-160 hours of classroom instruction per year conducted either during the week or on Saturdays.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 17 years of age
- High school diploma or GED
- Read, write and speak English and pass the SLEP test
- Able to perform rigorous manual labor of trade and ability to work at heights. May have to pass a standard physical exam
- Be able to read and understand basic math, and follow instructions and safety practices. May need to pass the SLEP test



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.

- Drivers License
- May have to pass a Drug Test

May have to successfully complete a 12-week pre-apprenticeship class required for bricklayers.



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



MILLWRIGHTS

THE WORK

Millwrights are crafts people who do precision machine installation and assembly using sophisticated measuring instruments. They install and align heavy industrial machinery such as conveyor systems, pumping systems, packaging systems, compressors, electric generators and turbines.

WORKING CONDITIONS

Millwrights work in hydroelectric dams, paper mills, nuclear power generating stations, gas or coal-fired generation plants, smelters and refineries. They use highly precise optical measuring and leveling instruments. You need good math skills along with the ability to think problems through, practical thinking, manual dexterity, the ability to work to very small tolerances (to a thousandth of an inch). May have to lift heavy objects.

THE APPRENTICESHIP

This program, depending upon trade, requires 6,000-10,000 hours (three to five years) of on-the-job training hours. An apprentice must attend 144-160 related classroom hours per year.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- Must provide proof of age of 17 or older
- Must have sufficient schooling to meet trade requirements, usually high school diploma or GED
- Must be able to perform the work of the trade
- Must successfully complete the pre-employment safety and orientation procedure
- May need to appear before the apprenticeship committee for an interview
- Must have adequate transportation to job sites

(Additional desirable qualifications are a math and/or physics background)



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



OPERATING ENGINEERS

Construction Equipment Operator

THE WORK

Operating engineers operate heavy construction equipment such as cranes, bulldozers, pavers, trench excavators and many other kinds of equipment used in constructing buildings, dams, airports and highways. They also work in the sand and gravel, cement and asphalt industries; in the shipyards; on the water with dredges, oil refineries, oil pipelines, sewer and water construction, ports of major cities, municipal work with cities and counties, landscaping, scrap metal work, and the forest products industry. Operating engineer apprentices can also work in the mechanical field as heavy-duty truck and equipment mechanics and in the field of technical engineer (surveyor).

WORKING CONDITIONS

The work is outdoors and can depend on the weather. Bad weather can shut down jobs as generally the machinery is not operated in heavy snow or rain. The average operator works 1,200 to 1,500 hours per year; some get less work, depending upon their job skills. The union hall dispatches operating engineers to jobs unless you are recalled by a former employer, you must go to the job you are called for. Apprentices are sometimes required to commute long distances or to relocate for a few weeks or months to obtain gainful employment. Apprentices must be flexible and adaptable to different environments, job sites and requirements.

THE APPRENTICESHIP

This program requires 6,000 to 8,352 hours of on-the-job training with an additional 144 to 201 hours of supplemental classroom training per year.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years old
- High school diploma or GED
- Physically able to perform work of the trade
- Washington State driver's license and dependable transportation
- Applicants must be able to read, write and speak English
- Applicants must be a resident of the geographical area covered by the trade prior to application
- Mechanic applicants must have two years of vocational training in the trade or equivalent
- Pass a substance abuse test
- Successfully complete the pre-employment safety and orientation procedure



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



PAINTERS AND DECORATORS (and TAPERS)

Drywall Finisher/Sign & Pictorial Painter/Painter-Sandblaster Decorator/Maintenance/Environmental Control Industrial/Marine/Equipment/Auto/Traffic Control, Carpenter-Painters

THE WORK

Painters and decorators prepare and paint a diverse array of surfaces. There are three main areas of the industry: industrial (steel structures like ship tanks and bridges), commercial buildings (everything from small businesses to high skyscrapers), and residential buildings (homes and small apartments). Painters need to be skilled with a wide variety of hand and power tools, depending upon the type of surface preparation and coating required. Drywall finishing is the work of tapers who fill in and smooth seams in sheets of drywall.

WORKING CONDITIONS

Work is conducted indoors and outdoors at floor level, on ladders, rigging and scaffolding. Painters and decorators use a variety of chemicals and are exposed to fumes from paints and solvents. Workers may have to travel great distances to work sites. There are often periods of unemployment between jobs. Tapers work generally in warm and dry conditions but may work outdoors in cool conditions sometimes.

THE APPRENTICESHIP

This program, depending upon trade, requires 3,000 to 8,000 hours of on-the-job training and an additional 144-465 hours of related classroom instruction per year, which is usually conducted one night per week after work on your own time. Satisfactory progress must be maintained in training classes.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 17 years old
- Prefer high school diploma or GED
- Good physical strength and eyesight
- Possess own transportation



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



PILEDRIVERS

Piledriver/Bridge/Dock & Wharf Builder Carpenter-Piledriver

THE WORK

Piledrivers work with power and hand tools. They drive all types of piling. They work on docks, bridges and ferry landings. There are wood, steel and concrete pilings. They run chain saws and burning torches. They use air tools to chip the piling. They also build the formwork on the pilings and drill holes to put pilings into the ground and formwork on bridges. They do new construction and rebuild old. Piledrivers also do foundation work for buildings, welding and many other related work processes.

WORKING CONDITIONS

The work piledrivers perform is very physical and involves climbing, kneeling, lifting and squatting. Jobs are very strenuous, as they have to work with heavy timbers. Work is done both indoors and outside, depending upon the nature of the construction. Job site locations change so you will have to travel to take an available job. You may work inside, outside or on a workboat on the water. You could work in a hole 100 feet below ground or 100 feet above ground. You must be in good health, meet certain strength requirements, be agile and have good hand-eye coordination.

THE APPRENTICESHIP

The apprenticeship program requires 8000 hours (about four years) to complete and attendance at related training classes for a minimum of 144 hours per year depending upon the program. This training can be scheduled for two weeks in the spring and two weeks in the fall.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years old
- Be a high school graduate
- Physically able to perform the work of the trade
- Sufficient education to meet trade requirements
- Have access to dependable transportation to job sites
- Complete pre-employment safety/orientation class
- Have required hand tools
- Proof of residency in your apprenticeship region
- Must pass qualifying entrance exam



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



PLASTERERS

THE WORK

Plasterers finish interior walls and ceilings of buildings, apply plaster on masonry, metal, wirelath or gypsum. They also apply cement on masonry, metal, and wirelath (stucco).

WORKING CONDITIONS

Seventy-five percent of this work is done outside on scaffolds. The work can be seasonal depending upon weather conditions, with intermittent periods of unemployment. Most of the work is done commercially, but some is residential. The work involves heavy lifting, bending, climbing and standing.

THE APPRENTICESHIP

This program requires 6,000-7,000 hours (three to four years) of on-the-job training with an additional 144 hours of classroom supplemental training per year.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years old
- High school diploma or GED
- Current Washington State driver's license
- Social security card
- Physically fit to perform work of trade
- Must have own transportation to get to job sites



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



PLUMBERS, STEAMFITTERS, PIPEFITTERS, AND REFRIGERATION WORKERS

Housing Plumber, Residential Plumber, Refrigeration Fitter, Refrigeration Mechanic, Maintenance Plumbers/Steamfitters, Marine Pipefitter

THE WORK

Plumbers, steamfitters, pipefitters, and refrigeration fitters are all crafts people who install piping systems that carry water, steam, air and other liquids or gases necessary for sanitation, industrial production, heating and air conditioning, and many other uses. They also alter, remodel and repair existing piping systems and install plumbing fixtures, radiators and other heating units, some appliances, as well as refrigeration and air conditioning equipment. Workers measure, cut and bend pipe, weld, braze, caulk, solder, glue or thread joints at residential and commercial job sites.

WORKING CONDITIONS

Plumbers and pipefitters are sometimes required to work in high places or in confined areas. Also, because much of the work is performed outdoors, they are exposed to adverse weather conditions at times. Repair work is often during an emergency and might be in dark, wet and cramped conditions in ditches, under houses and in other difficult situations.

THE APPRENTICESHIP

This program, depending upon trade, requires 4,000-10,000 hours of on-the-job training. Additionally, all apprentices are required to attend 144-1,000 hours related training classes. Some programs schedule these classes in the evening.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years old with a High school diploma
- Must have completed one year of algebra and one year of plane geometry and must produce transcript
- Math education requirements may be waived if you can show proof of mathematical knowledge
- Score high on STAB S61R aptitude test
- May need to be a resident of the county for at least one year
- Valid Washington State driver's license



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



ROOFERS

THE WORK

Workers install new roofs and repair and remove old roofs using a variety of materials. They cover roofs with wood shingles, composition, shingles, asphalt and gravel, slate, tiles and single-ply materials. The work is conducted on both commercial and residential buildings.

WORKING CONDITIONS

Roofers usually work outside on top of structures, but sometimes work inside or below ground level. The work is physically demanding and requires heavy lifting, climbing, bending and squatting, with a significant risk of injury from falls. The work is performed in all weather conditions. It is often very hot. There may be periods of unemployment between jobs, with jobs lasting only nine to ten months a year.

THE APPRENTICESHIP

This program requires 3,000 4,900 hours of on-the-job training, and 144 hours per year of supplemental classroom instruction.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years of age.
- Be physically able to perform the work of the trade



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



SHEET METAL WORKERS

Industrial Sheet Metal; Industrial Sheet Metal Fabricator; Industrial Sheet Metal Worker/Welder (Maint); Maintenance Sheet Metal Worker/Welder; Marine Sheet Metal Worker; Residential Sheet Metal Worker; Residential Sheet Metal Worker & Serviceman; Sheet Metal; Sheet Metal Installer; Sheet Metal Service Technician; Sheet Metal Test, Adjust and Balance; Sheet Metal Worker; HVAC Service Technician, and Sheet Metal Worker (Manufacturing only)

THE WORK

Sheet metal workers fabricate, install and service heating, venting and air conditioning systems, blowpipe and industrial systems, metal roofing, coping and flashing, stainless steel work for restaurants, kitchens and hospitals. They prepare shop and field drawings manually and with computer programs. They provide HVAC/R service.

THE WORKING CONDITIONS

Sheet metal workers may work in shops doing fabrication or out on construction sites doing installation. You need to be able to work at heights as well as in enclosed spaces and in varying weather conditions.

THE APPRENTICESHIP

This program, depending upon trade, requires 4,000-10,000 hours of on-the-job training and 144-600 hours related classroom instruction.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years old
- High school diploma or GED/equivalent
- Able to perform work of the trade
- Copy of high school transcript
- Valid Washington State driver's license
- Proof of insurance
- Complete math test



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



SPRINKLER FITTERS

THE WORK

Sprinkler fitters are pipefitter specialists in fire protection. They install fire protection systems of all sorts - for every commercial building or risk there is a fire protection system designed for that specific hazard.

WORKING CONDITIONS

This job requires a person with the ability to carry heavy pieces of pipe of various lengths, to climb and work at various heights and to have the manual dexterity to handle the tools of the trade. It is hard work that requires dedicated, intelligent and reliable people who must often travel to different job sites over a seven county area in the performance of their trade.

THE APPRENTICESHIP

This is a five-year program including 10,000 hours of on-the-job training and 144 hours per year classroom training. Apprentices are eligible for upgrade to the next classification and pay bracket every six months.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 18 years old
- Birth certificate available at time of application
- High school graduate, GED or equivalent; show proof of completion or diploma at time of application
- Physically fit to do the work of the trade
- May have to pass aptitude test and oral examination/interview



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.



STATIONARY ENGINEERS

THE WORK

Stationary engineers operate and maintain boilers, fans, pumps, air compressors, electric motors, engines, turbines, generators, refrigeration and HVAC systems, diesel engines, and heating systems in commercial and industrial buildings. They monitor boiler water levels and burners, temperatures and pressures, heating, cooling and ventilation systems. Stationary engineers also perform work as custodial engineers and as wastewater and water treatment engineers.

WORKING CONDITIONS

Work is conducted inside and outside in all kinds of weather conditions. Workers carry tools and climb scaffolds, work at different elevations and in cramped, confined spaces.

THE APPRENTICESHIP

The stationary engineer apprenticeship and waste water/water treatment apprenticeship is a four-year program requiring 8,000 hours of on-the-job training, along with 144 hours of supplemental classroom training per year.

APPRENTICESHIP ENTRY REQUIREMENTS (not the same for each program, please review the Program Standards for each program for specific requirements)

- At least 19 years old
- Must have high school diploma or GED
- Be physically able to meet the demands of the trade
- Possess a valid driver's license and dependable transportation
- Must be able to read, write and speak English



This job description is excerpted from the Washington State Registered Apprenticeship Catalog, courtesy of Washington State Department of Labor and Industries. Full catalogs are available online at: <http://www.rtc.edu/CommunityResources/CCE/TrainingSites/Apprenticeship%20program.pdf>.

ARCHITECTS and ENGINEERS

THE WORK

Architects are licensed professionals who design new and remodel buildings, facilities and houses. They coordinate all other disciplines in the design and building phases of construction. Architects ensure structures are aesthetically appealing and safe. In fact, they must incorporate safety into project design, building and the final structural maintenance/sustainability. Architects are tested in engineering systems, building construction methods, codes and contracts. Architects fulfill a broad scope of work compared to engineers, who design specifications of systems.

Engineers typically specialize in the design of a system, which includes application of mathematical and physical science principles. These systems can range from structural, mechanical and electrical systems. This application is essential to testing and verifying structural soundness and sustainability in a variety of circumstances. For instance, a civil engineer may design a bridge, and then test his or her design against many variables, including capacity, weight, and environmental factors, such as earthquakes.

WORKING CONDITIONS

Architects and engineers may work alone or in teams, and will do so in a variety of locations, including an office and the actual worksite. They must work with contractors, inspectors, and construction workers to translate their design to safe building practices.

ENTRY-LEVEL JOB REQUIREMENTS

Architects and engineers are licensed professionals. Typically, an architect or engineer has completed at least a baccalaureate degree, and has successfully passed local and state licensure examinations. Many people who choose one of these career paths start at a community or technical college and transfer to a university to complete their degree; some two-year programs are gaining as much recognition as university-level degrees. Other people may begin a career in the building trades, and as they progress, choose to return to school to build on their tremendous experience as a builder by applying it to architecture or engineering.

Some mid-career architects and engineers move their design know-how into the field full time, as superintendents or inspectors.