

## Construction Trades • Extended Learning Courses

Extended learning courses are short-term educational opportunities with specific quarterly start and end dates. Call 253.680.7300 or 7402 for information.

### FORKLIFT OPERATION

#### Fork Lift Operation, FRKLF 101

Become a state certified forklift driver. Regulations, driving test, including pre-trip test are covered. Fee includes workbook. **Prerequisite:** Must be 18 or older.

3605 BSC-BldgA	T,W,Th	3/17-3/19	6-10p	12hrs	\$225
3606 BSC-BldgA	T,W,Th	4/14-4/16	6-10p	12hrs	\$225
3602 BSC-BldgA	Sat	4/25 & 5/2	9a-3p	12hrs	\$225
3607 BSC-BldgA	T,W,Th	5/19-5/21	6-10p	12hrs	\$225
3605 BSC-BldgA	T,W,Th	6/9-6/11	6-10p	12hrs	\$225
3602 BSC-BldgA	Sat	6/20 & 6/27	9a-3p	12hrs	\$225
3603 BSC-BldgA	Sat	7/18 & 7/25	9a-3p	12hrs	\$225

#### Forklift Operator Refresher & Re-Certification, FRKLF 111

Stay current with the OSHA Standard for forklift operator certification. OSHA Standard 1910.178 requires forklift operators to be evaluated every three years or prior to the date of the certification expiration. This class covers the required areas of machine design, state and federal regulations, inspection procedures, safe operation, and the fuels used for forklifts. Students will learn through lecture, hands-on demonstrations, and hands-on operation.

3601 BSC-BldgA	Sat	Arranged	9-3p	6hrs	\$125
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### H V A C

#### Air Conditioning/Refrigeration EPA Exam (CFC Exam), HVAC 121

An Environmental Protection Agency (EPA) approved certification course that meets the requirements set forth in Section 608 of the Clean Air Act as regulated by the EPA. The preparatory manual contains information necessary for a technician to prepare for Type I, Type II, Type III or UNIVERSAL certifications. Must come in at least TEN DAYS PRIOR TO THE EXAM DATE, register and receive the preparatory manual (study guide).

3450 BDC-E103	M	4/20	7-10p	3hrs	\$95
3451 BDC-E103	M	6/8	7-10p	3hrs	\$95

#### Industry Competency Exams (ICE Exam)

Formerly the ARI Exam, the ICE Exam measures industry-agreed standards of basic competency for entry-level (one year or less) technicians. ICE Exams are available in Residential Heating and Cooling, Light Commercial Heating and Cooling and Commercial Refrigeration. This is a great way to examine your skill level or to document your skills for employment.

7301 BDC-E103	F	5/8	8-11a or 12-3p	3hrs	\$95
7301 BDC-E103	F	6/26	8-11a or 12-3p	3hrs	\$95

#### HVAC, Basic, HVAC 093

Introduction to the basic theory of refrigeration, theory of operation and introduction to troubleshooting mechanical and electrical problems. Every effort will be made to see that the class meets the needs of those enrolled. Text not included in price.

7134 BDC-E103	Sat	5/2-7/25	8a-2p	66hrs	\$370
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### MACHINING

#### MasterCAM, Beginning, CAM 101

This is a great course for current industrial users and employees who need CAM skills using computers and MasterCAM software. Students will learn CAD drafting techniques, tool path processing and post processing NCI code. Text, approximately \$90, not included.

7113 BDC-E307	M,W	4/13-6/8	5-8p	48hrs	\$265
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#### Milling & Lathe Machining, Basic, MACH 256

Stay current with industry changes and gain machining skills to advance your employment. Learn introductory skills for manual milling machine or manual lathe, become familiar with blueprint reading, feeds and speeds. Create parts by learning to manipulate the allowable tolerance and using Hi-Tech equipment. A great course to upgrade skills.

7114 BDC-E101	T,Th	3/17-4/30	4:30-8:30p	48hrs	\$325
7114 BDC-E101	T,Th	6/9-7/16	4:30-8:30p	48hrs	\$325

#### Milling & Lathe Machining, Beginning, MACH 089

This is a hands-on course providing entry-level skills with a choice of manual engine lathe or manual milling machine. Students learn: how to manipulate fractions and decimals to reach allowable tolerances; how to read machine-measuring instruments; become familiar with blueprint reading, feeds and speeds and utilize Hi Tech equipment to create machined and milled parts. Course meets minimum skill requirements for persons applying for employment and some apprenticeship programs. Limited to 15 students.

7120 BDC-E101	T,Th	3/17-5/28	4:30-8:30p	80hrs	\$440
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#### Solid Works for Machinists, MACH 097

This class is designed to introduce students to the basics of 3D mechanical CAD Software using SolidWorks. Students learn menu navigating, setting the environment, sketching, extrusion, pocketing, and 3C geometry and more. Whether you are working in or plan to enter the manufacturing world, you should consider taking this class as SolidWorks is rapidly becoming the design software of choice in the industry. Seating is limited.

7116 BSC-E105	T	3/10-6/2	5-9p	48hrs	\$274
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### WELDING

#### Welding, Basic, WELD 055

Oxyacetylene and arc for beginning or experienced welders. Covers flat and vertical beads on plate, cutting and burning. Arc covers 6010 and 7018 electrodes in horizontal, vertical and overhead positions.

7293 BSC-B311	M,W	3/9-4/20	5:30-8:30p	33hrs	\$200
7294 BSC-B311	M,W	4/22-6/1	5:30-8:30p	33hrs	\$200
7293 BSC-B311	M,W	6/3-7/8	5:30-8:30p	33hrs	\$200

#### Welding, Advanced, WELD 21

Processes using inert gas - GMAW in dual shield and short arc; MIG, and Tungsten inert gas welding. Prerequisite: Instructor approval.

7292 BSC-B311	M,W	3/9-4/20	5:30-8:30p	33hrs	\$396
7292 BSC-B311	M,W	4/22-6/1	5:30-8:30p	33hrs	\$396
7292 BSC-B311	M,W	6/3-7/8	5:30-8:30p	33hrs	\$396

### SHIPPING & RECEIVING

#### Introduction to the Job of Transportation Clerk, LOG 089

Within the global logistics, freight forwarding, customs brokerage, and distribution industries, the transportation clerk assists with developing logistic plans to move goods and services at the best possible rate, speed and reliability. As an introductory overview, this course provides participants with an introduction to the profession, its importance to the logistics industry, and many of its important duties and responsibilities.

7178 BDC	T,Th	4/14-5/19	6-9p	33hrs	\$325
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### KEY TO EXTENDED LEARNING COURSES

Phlebotomy, Advanced, PNURS 293 (Course #)						
Item#	Campus	Room #	Day	Dates	Time	Hours
3408	BDC	E-211	Th	3/20 - 7/10	6-9p	147hrs
						\$775
BDC	Bates Downtown Campus, 1101 S Yakima Ave					
BMC	Bates Mohler Campus, 2320 S 19 <sup>th</sup> St				BSC Bates South Campus, 2201 S 78 <sup>th</sup> St	

## ON-LINE GREEN CONSTRUCTION & REMODELING • Spring Quarter: 3/16-5/30, Summer Quarter: 6/8-7/24

\$165 PER CLASS PLUS TEXTBOOKS • To register, call 253.680.7300 or [www.bates.ctc.edu/Registration](http://www.bates.ctc.edu/Registration).

Last day to register for Spring Quarter: 5/15. Last day to register for Summer Quarter: 7/10.

**NEW!**

These courses have been approved by the U.S. Green Building Council and are designated as approved USGBC educational training courses. If you're interested in learning about the impact of construction and remodeling on global warming and the real costs of utilizing green construction methods and technology, then sign up for our new on-line green construction series. Each class is worth two college credits. **Take one course or all five!** Upon successful completion of all five courses, students will receive ten college credits and can apply for a Certificate of Training. Green Construction & Remodeling - Introduction is a prerequisite to taking any of the remaining courses.

### Green Construction & Remodeling (GCR) – Introduction

#### 3331 GCNST201

As the first in a series of five, this class provides an overview of "built green" and "LEED" methods and processes that are used in new construction and remodeling. **This class is required and serves as a prerequisite for the other four courses.** Students can choose to take this class concurrently with other Green Construction classes.

### GCR – Building Materials

#### 3332 GCNST202

Learn to select appropriate building materials for green construction projects and appropriately identify cost and benefit criteria during the project planning stage.

### GCR – Air Quality

#### 3333 GCNST203

Become knowledgeable in identifying air quality issues, testing and measurement techniques, and identify methods to remove air quality pollutants. Students learn how to select appropriate equipment/technologies to create or upgrade to better indoor air quality that adhere to the standards of green construction and remodeling.

### GCR – Water Quality

#### 3334 GCNST204

Students become familiar with water cycles and distribution, water quality factors, and water treatment and optimization technology.

### GCR – Marketing & Sales

#### 3335 GCNST205

The final course in the series introduces the students to marketing techniques for green construction building and remodeling. Learn how to identify a customer base, how to present green construction and remodeling to clients, and how to reach potential customers.

This series is perfect for builders, contractors, remodelers, homeowners and buyers, facilities managers, real estate professionals, environmental engineers, architects, environmental sciences students, and sustainability managers and anyone else who has an interest in sustainable building.

## Register for Extended Learning • 253.680.7300 or 253.680.7402

Register at least five days prior to the first class. Bates will cancel a class if there are too few registrants. Bates reserves the right to cancel classes, reschedule classes or change instructors. You will be notified only if class is full or if a cancellation occurs. To officially withdraw from class, call 253.680.7300 or 680.7402, or go to the downtown campus. Fees subject to change

#### IN PERSON

M through Th, 8am - 8pm | Fri 8am - 4:30pm  
Bates Downtown Campus, M210  
1101 South Yakima Avenue, Tacoma

Bates South Campus, Building A  
2201 South 78<sup>th</sup> Street, Tacoma

BY PHONE - 253.680.7300 or 253.680.7402

BY MAIL - Use Registration Form on Page 3.

ONLINE - [www.bates.ctc.edu/registration](http://www.bates.ctc.edu/registration)

#### Self-Support Class Refund Policy:

100% When Bates Technical College cancels the class.  
100% When withdrawal is on or before one business day prior to the first day of class. To officially withdraw from the class, call 253.680.7300/7402, or go to the downtown campus, M210.  
0% When registered, but do not attend the class. No refunds once the class has started.

[www.bates.ctc.edu/Registration](http://www.bates.ctc.edu/Registration)