DELMAR CENGAGE Learning™

Green Jobs

Green Construction

How Green is Changing Construction Jobs

According to the Green Building Association, growth in green technology construction could achieve 15 – 20% growth rates during the next 5 years. A Booz Allen Hamilton study released by USGBC in November 2009, predicts green building will support or create 7.9 million jobs between 2009-2013 and will contribute $554 billion to the U.S. gross domestic product.

As technologies emerge, it will become increasingly difficult to separate green from non-green. Green construction technologies, approaches, and philosophies are rapidly becoming standard industry practices. It is essential for your school to match your curriculum for the construction trades to the jobs of the 21st century.

The Future of Construction Employment

Construction Employment Projections

GREEN CONSTRUCTION JOB CREATION BY INDUSTRY SECTOR (2009-2013)*	NUMBER OF JOBS BY 2013
Construction of new nonresidential commercial and health care structures	4,764,011
Maintenance and repair construction of nonresidential structures	1,990,685
Construction of new nonresidential manufacturing structures	511,206
Construction of new residential permanent site single- and multi-family structures	461,834
Construction of other new nonresidential structures	231,667

**Source: Green Jobs Study, USGBC / Booz Allen Hamilton released by USGBC(2009)*

For information on "greening" your curriculum contact your local Delmar, Cengage Learning Representative

Or visit us at www.thegreendestination.com

1-800-354-9706

Green Construction *cont.*

Employment and Education Changes for Construction Workers

The fact is, green construction is rapidly becoming THE way of doing business. All workers at all levels of the construction trades need to keep up with new techniques and be in compliance with new codes in this new green economy. Workers in the construction trades who do not have current certifications or understanding of technology will have difficulty finding positions.

To be "green" in Construction workers and contractors need to:

- promote sustainability of the whole enterprise (or community) through sustainable and green building practices
- implement energy efficient solutions through alternative/ renewable energy
- use environmentally-friendly chemicals and components
- reduce emissions and waste
- incorporate recycling and reuse of materials
- understand and utilize the latest in green technologies, including equipment upgrade and energy-efficient issues.

Education – Connecting your Curriculum to the 21st Century

What does this all mean for the education of construction workers?

The core requirements for an education in the construction trades will still consist of the completion of an apprentice program, an associate degree, or a certificate program.

There is a growing need in the marketplace for construction cost estimators to receive specialized training in green new construction and retrofitting existing facilities. Currently there are a limited number of schools and programs to train construction estimators and project managers in green technologies. There is tremendous opportunity for schools to recruit new students as well as experienced workers who need this specialized training.

Essential Green Construction Courses & Competencies

- Sustainable & Green Construction
- Construction Management
- Civil Technology
- Green Building
- Renewable Energy Basics: Solar, Geothermal, Wind Energy
- Codes and Compliance
- Energy Efficiency and Smart Grid
- Pollution Prevention
- Water Conservation and Reuse
- Recycling and Waste Reduction

Additional Resources, Certificates and Certification

- Home Builders Institute, National Association of Home Builders: **www.hbi.org; www.nahb.org**
- HVAC Excellence provides certifications and credentialing exams including the Green Awareness credentialing exam. **www.hvacexcellence.org**
- Mechanical Contractors Association of America: **www.mcaa.org**
- National Center for Construction Education and Research: **www.nccer.org**
- U.S. Green Building Council - LEED Certification (version 3): **www.usgbc.org**