



# GREEN INFRASTRUCTURE AND SUSTAINABLE COMMUNITIES

## OPPORTUNITIES IN NEW MARKETS

**July 13–16, 2009**  
**Denver, CO**

*A unique four-day certificate course  
presented jointly by the  
American Council of Engineering Companies  
and  
Colorado State University*

**ACEC**

AMERICAN COUNCIL OF ENGINEERING COMPANIES

100 Years of Excellence

**Colorado  
State  
University**



# • Green Infrastructure

## • Sustainable Communities

### • Insights & Opportunities



The unique *Green Infrastructure and Sustainable Communities* course systematically lays out the complex interdisciplinary challenges of real-world sustainability problems. The curriculum examines key environmental planning and design processes and showcases applications of sustainable engineering by some of the leading practitioners in the United States.

#### ***By participating in this new certificate program, you will:***

- Understand the opportunities in sustainable development.
- Assess major challenges facing business and government relevant to sustainable facilities and infrastructure.
- Become familiar with national and international metrics for sustainability.
- Learn about new tools for conducting sustainability audits.
- Apply life-cycle analysis to projects and programs.
- Explore how to inaugurate or expand a business practice in sustainable engineering and planning.
- Consider sustainable transportation, buildings, and water projects and degree of success.
- Gain insights on sustainability/growth tensions, and individual projects/local health and safety issues.

## Who Should Attend

This certificate course is appropriate for engineers and planners in the many disciplines and professions involved in the built and natural environment, including **professional engineers, urban and regional planners, government agency professionals, developers and contractors, landscape architects, and engineering business development directors.**

## Day One

### Registration and Breakfast

#### Welcome and Introductions

- What You Need to Know About Sustainable Development
- Varied Roles of Engineers in a Sustainable Future
- Reframing the Conversation About Sustainable Development

#### Sustainable Development: The Business Context

- Five Critical Issues for Engineers and Society
- Impacts and Urgencies of Non-sustainability on Stakeholders
- Sustainability Market and Legislative Drivers and Incentives
- Sustainable Built and Natural Environment: Theories and Practice
- Moving Up the Sustainable Project “Food Chain”
- Developing a Business Case for the Sustainable Project

#### Sustainable Design Tools and Techniques

- Conducting Sustainability Audits and Assessments for Clients
- Audit and Assessment Exercise

### Reception

## Day Two

### Sustainable Design Tools and Techniques (Continued)

- Setting Sustainability Goals and Metrics
- Whole Systems Integration and Holistic Design
- Use of Life Cycle Assessment (LCA) and Costing
- Application of LCA Software to Engineering Projects
- Tools for Designing and Delivering Holistic Solutions
- Sustainable Performance Standards Including LEED, FIDIC Project Sustainability Management (PSM) Guidelines, ASTM, GreenGlobes, BREEAM, etc.
- Decision Support Tools for Improving Energy Efficiency

## Day Three

### Impacts of Development and Projects on the Environment

- Engineering Impacts of Global Climate Change
- Extraction, Use and Recycling of Resources
- Human Effects on the Chemistry of Air, Land and Water
- Carbon Footprinting: Facilities, Infrastructure, Communities

### Sustainability Projects Field Trip

## Day Four

### Sustainable Design for Specific Engineering Markets

- Sustainable Urban Water Management
- Sustainable Transportation Projects
- Sustainable State-of-the-Art Buildings
- Innovation in Sustainable Design

#### Additional Topics in Sustainable Engineering

- Application of BIM Software in Sustainability
- Working with Clients on Sustainable Engineering Projects
- Additional Tools and Techniques for Sustainable Design

### Summation, Award of Certificates



# Expert Faculty

**Dr. Larry A. Roesner**, Professor, College of Engineering, Colorado State University

**Dr. Callie W. Babbit**, Assistant Professor, Golisano Institute of Sustainability at Rochester Institute of Sustainability

**David Carlson**, Senior Environmental Protection Specialist, US Environmental Protection Agency

**Terry D. Bennett**, Senior Manager of Industry Solutions, Autodesk GIS Division

**Dr. David R. Stewart**, President and CEO, Stewart Environmental Consultants

**Mark Van Soestbergen**, Founder of the International Carbon Bank and Exchange (ICB&E)

**Bill Wallace**, Founder and President, Wallace Futures Group LLC



## Registration

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Registration fee is \$1,545 per person for ACEC members and \$1,745 per person for non-members who register in advance through Friday, June 12, 2009. Thereafter, registration fees will be \$1,745 per person for ACEC members and \$1,945 per person for non-members. Breakfast and lunch for four days are included in the Registration fee. Attendees earn 28 PDHs.

### Number of People Attending

#### Advance

#### After June 12, 2009

ACEC Members \_\_\_ at \$1,545 = \_\_\_\_\_ \_\_\_ at \$1,745 = \_\_\_\_\_

Non-Members \_\_\_ at \$1,745 = \_\_\_\_\_ \_\_\_ at \$1,945 = \_\_\_\_\_

### Attendee Information

*(For multiple attendees, please attach separate copies of this form.)*

Name: \_\_\_\_\_

Name for Badge: \_\_\_\_\_

Title: \_\_\_\_\_

Discipline: \_\_\_\_\_ Role in Firm: \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

### Payment Information

For credit card registration, please provide the following:

American Express®       VISA®       MasterCard®

Card number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Name as shown on card: \_\_\_\_\_

Signature: \_\_\_\_\_

*Make check payable to ACEC and send along with form(s) to:*

**American Council of Engineering Companies**

**Attn.: Institute for Business Management**

**1015 15th St., N.W., 8th Floor**

**Washington, D.C. 20005-2605**

*Or FAX to 202-789-7220 (secure)*

### Location

Sessions will take place in the Colorado State University Denver Center, 410 17th St., Denver, CO 80202.

**Hotel Information:** There are two designated event hotels: **Comfort Inn**, 401 17th St., Denver, CO 80202, has S/D rates starting at \$99 plus tax. Call 800-237-7431 and request this CSU guest rate. CSU preferred rates will also be available at **The Brown Palace Hotel**, 321 17th St., Denver, CO 80202. Call 800-321-2599 for rates and reservations.

Please contact hotels directly to make your arrangements. Early reservations are suggested to receive the ACEC/CSU rates, which are subject to availability.

### Refunds, Credits, Substitutions and Cancellations.

For cancellations received by ACEC at least 30 days before the program date, ACEC will issue a full refund of registration fees, less a \$100 administration fee. For cancellations received by ACEC between 29 and 15 days before the program date, ACEC will issue credits toward future ACEC education seminars. Credits are valid for six months toward any ACEC seminar. For cancellations received by ACEC less than 15 days before a program date, In addition, ACEC will issue no refunds or credits for "no-shows." Substitute attendee registrations may be made at any time.

**Additional information is also available at the ACEC website [www.acec.org](http://www.acec.org), by e-mail to [Education@acec.org](mailto:Education@acec.org), or by phone at 202-347-7474, Ext. 338.**



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## Exclusive Program Features

- Institute format in partnership with Colorado State University
- Elite faculty from among America's leading practitioners working in green infrastructure
- Exceptional program focusing on North American green infrastructure projects, presented by engineering experts
- Unique field trip to area sustainable projects
- Course materials including case studies, workshop exercises, references and handouts
- Award of 28 PDHs from ACEC and Certificate in Green Infrastructure and Sustainable Communities from Colorado State University
- Breakfast and lunch daily

A One-of-a-Kind Course Experience in Green Planning and Design

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ABERDEEN, SD  
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1015 15<sup>th</sup> St. NW, 8<sup>th</sup> Floor  
Washington, DC 20005-2605

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