## **Green Future Management Certificate Program**

Our Green Future Management program consists of 70 hours of state of the art instruction. A certificate in Green Future Management will be awarded upon completion of four (4) Modules and Capstone Project which can be included in your professional portfolio. Modules may also be taken on an individual basis and in any order. Textbook required for Modules 2 - 4. Available in college bookstore.

#### Our program is designed for:

- Experienced professionals in the fields of architecture, engineering, construction, real estate, government, nonprofits and sales
- Independent business owners and managers
- Entrepreneurs interested in developing their own Green enterprises
- College graduates interested in entering this emerging field
- Individuals interested in learning about sustainability

#### Graduates of this program will:

- Demonstrate an in-depth knowledge of current sustainability practices
- Have experience collaborating on sustainable projects and policies
- Be able to advance Green business practices at their own organization
- · Have current knowledge of emerging industry certifications including: BPI, USGBC, Energy Star, Green Advantage and LEED® (Leadership in Energy and Environmental Design).
- Master the basic information required for the basic level LEED® Green Associate Exam (We also offer separate Exam preparation courses)

**Module 1** Sustainability Fundamentals

Module 2 Energy and Water Efficient Design

**Module 3** Indoor Environmental Quality/Life Cycle of Green Materials

**Module 4** Green Building for Existing Homes/Sales and Marketing

**Studio Capstone Presentations (Coming in January 2011)** 



## Module 1:

## **Sustainability Fundamentals** (It is highly recommended to begin with this

of sustainable design, defining green building and specific design and construction measures contextually as it plays a critical role in the necessary to reduce building loads through environmental, social and economic well being passive solar design strategies, fundamentals of society. Case studies will highlight the benefits, of the critical interactions between building challenges, public policies and market driven shell, HVAC equipment and lighting and initiatives necessary for successful sustainable occupant interaction with the building system. development implementation.

1.2 CEU. Tuition and fees: \$295 XTC154-091220 Sept 21-Sept 29 4 sessions Tu.W Darren Molnar-Port, MCCC Instructor

## **Module 2:**

#### **Energy and Water Efficient Design**

You will learn how to design a building to meet high performance guidelines. Topics We begin with a foundation of the principles will include an overview of the comprehensive We present an overview of the natural systems based design strategies utilized to reduce environmental impacts of conventional site and landscape design. You will gain an understanding of the approaches to outdoor and indoor water conservation strategies, onsite storm water management, and sustainable landscaping.

3.0 CEU. Tuition and fees: \$745 XTC155-091221 Oct 5-Nov 3 10 sessions Tu,W Robert Wisniewski, Director of Sustainable Design Paul Cvale, RA, LEED AP, CSDP

#### Module 3:

## **Indoor Environmental Quality/Life**

## **Cycle of Green Materials**

This course will describe both the building moisture dynamics and airflow that directly affect indoor environmental quality and energy consumption and factors linking environmental exposures to health problems. Topics to be discussed in detail include; radon, combustion products (including building ventilation and the ASHRAE 62.2 Standard) lead, mold, asthma triggers, volatile organic compounds, and emerging issues including; flame retardants, BPA and Chinese drywall. In addition, this course will provide fundamental understanding of what makes a product green, what the main components are in our most common building materials, the impacts each element has on the environment and what to consider when designing a home directly relating to material specifications. Recycling and bulk purchasing of green materials will be addressed from both residential and commercial perspectives.

1.5 CEU. Tuition and fees: \$375

XTC156-091222 Nov 9-Nov 30 5 sessions

\*Class will not meet Nov 23, 24 Joe Ponessa, Ph.D. professor emeritus at Rutgers

Darren Molnar-Port, MCCC Instructor

## Module 4:

## **Green Building for Existing Homes/**

#### Sales and Marketing

Green Building is all the rage these days for new construction. Learn how we specifically implement these practices in existing homes, safely, economically, aesthetically and environmentally, and then learn to market these products. Brand your organization as GREEN and convey your message with high impact to your customers. Certification avenues (LEED®, BPI, USGBC, GREEN ADVANTAGE and others) will be discussed as well as the steps to effectively integrate green language and practices in the work environment to enhance your marketing potential.

0.9 CEU. Tuition and fees: \$225

XTC157-091223 Dec 1-Dec 8 3 sessions Darren Molnar-Port, MCCC Instructor

Robert Schmitz, AIA, LEED®, USGBC - NJ

#### **Studio Capstone Presentations**

Prerequisite: Students should complete all four (4) courses before enrolling in the Capstone course. Independent study culminating in a four-hour class where students present their projects. 0.4 CEU. Tuition and fees: \$95

XTC153-TBA Coming in January 2011 2 sessions Tu,W

Robert Wisniewski

Director of Sustainable Design

#### **LEED® EXAM PREPARATIONS**

We are offering Leadership in Energy and Design LEED® Certification preparation courses in three disciplines. These certifications provide a marketable credential to an employer, prospective employer or client. Please check the U.S. Green Building Council website at www.usgbc.org for eligibility requirements and to purchase the appropriate textbook for your course.

#### **LEED®** Green Associate Exam Prep

6-9pm

This credential represents mastery of basic knowledge in green design, construction and operations, as well as serving as the first step for professionals pursing a LEED® AP (Accredited Professional) specialization. Textbook optional: USGBC LEED® Green Associate Study Guide. (Note: Please bring a lunch — cafeteria closed.)

1.2 CEU. Tuition and fees: \$334

XTC106-091011 Sept 25-Sept 26

Sa,Su 9am-3:30pm\* 2 sessions

\*1/2 hour lunch

Sunil Tewarson, LEED® AP, IEEE, ASHRAE, USGBC. AEE

## **LEED® AP Homes Exam Prep**

This LEED® specialty provides a standard for professionals participating in design and construction of high-performance green homes which use less energy, water and natural resources, create less waste, and are more healthful and comfortable. Required book: USGBC LEED® AP (Accredited Professional) Homes Study Guide. (Note: Please bring a lunch — cafeteria closed.)

1.2 CEU. Tuition and fees: \$334

Oct 23-Oct 30 XTC139-091012 2 sessions Sa 9am-3:30pm\*

\*1/2 hour lunch

Sunil Tewarson, LEED® AP, IEEE, ASHRAE, USGBC, AEE

## LEED® AP ID+C Exam Prep

The LEED® AP for Interior Design and Construction (ID+C) provides a standard for professionals participating in the design and construction of high-performance commercial spaces and tenant improvements that provide healthful, productive places to work and are environmentally and economically responsible. Required book: USGBC LEED® AP (Accredited Professional) Interior Design & Construction Study Guide. (Note: Please bring a lunch — cafeteria closed.)

1.2 CEU. Tuition and fees: \$334

XTC142-091013 Dec 4-Dec 11

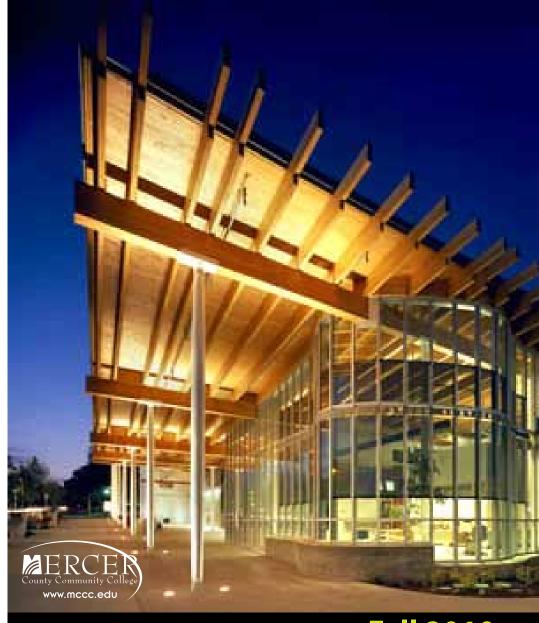
Sa 9am-3:30pm\* 2 sessions

\*1/2 hour lunch

Sunil Tewarson, LEED® AP, IEEE, ASHRAE, USGBC, AEE

# **Construction &** Green Management THE CENTER CONTINUING STUDIES **Programs**









# **Construction Project Management Certificate Programs**

Mercer's Construction Management Program enables today's construction industry managers to put principles and theories into immediate action on the job. Complete your projects on time and on budget. Earn our Certificate or just take the courses that interest you.

#### **Certificate in Construction Project Management**

To earn the certificate, you must take eight core courses and a minimum of 30 classroom hours of electives.

#### **Core Courses**

- Construction Blueprint Reading (Spring 2011)
- Construction Specifications and Contracts (Spring 2011
- Materials, Methods and Systems of Construction
- Contract Law in the Construction Industry

M,W

6:30-9:30pm

- Construction Change Orders and Claims
- Microsoft Project

8 sessions

Construction Cost Estimating I

Materials, Methods,

Robert Kress, MCCC Instructor

Construction Project Management (Spring 2011)

#### **Electives**

- AMA Successful Project Management
- AMA Successful Negotiating AMA Total Quality Management
- AMA Fundamentals of Finance and Accounting for Non-Financial Managers
- SketchUp Your Design
- Construction Cost Estimating II
- Any course in the Green Future Management

#### **SketchUp Your Design** Prerequisite: Familiarity with Microsoft Office

and Systems of Construction Learn to use the software Google SketchUp Prerequisite: Construction Blueprint Reading Professional version 7.0 to create a computer This basic comprehensive overview of different generated 3D model for residential, landscape and types of construction offers an introduction to the interior design. At the completion of the course, functions of a variety of building systems. **Textbook** you will have a PowerPoint electronic portfolio required. Available in college bookstore. to showcase your design, 3D modeling and 2.4 CEU. Tuition and fees: \$265 (includes \$14 technology skills to show your supervisor or future materials fee) employer. Workbook required. Available in XTC107-091059 Sept 13-Oct 6

college bookstore. 1.8 CEU. Tuition and fees: \$360 (tuition: \$165; lab fees: \$195)

XCP301-091060 Sept 23-Oct 28

6 sessions Dominick Rodriguez, MCCC Instructor

## **Construction Cost Estimating I**

Prerequisite: Construction Blueprint Reading, Materials, Methods & Systems of Construction and computer literacy

This course is designed for beginning estimators with an emphasis on developing a solid estimating foundation. Completion of the course will give estimators the knowledge to complete accurate quantity takeoffs of the material and labor costs, provide a strong knowledge of construction math, a sound estimating procedure and include a wide range of practice problems. Textbook required.

Available in college bookstore.

3.0 CEU. Tuition and fees: \$395 (includes material fee \$80)

XTC104-091061 Oct 13-Nov 15 M.W 6:30-9:30pm

10 sessions Robert Kress, MCCC Instructor

**Complete Microsoft Project 2007** Prerequisite: Introduction to the OS or equivalent experience

Using MS Project, you will learn to identify the steps involved in project planning, and how this industry-leading project management software can be helpful. Using textbook exercises combined with real-life examples, you will plan a project, link tasks effectively and work with time constraints. Workbook required. Available in college

1.2 CEU. Cost: \$235 (tuition and fees: \$108; lab fees: \$127)

XCA128-091038 Sept 17-Sept 24 9:30am-4pm\* 2 sessions

\*1/2 hour for lunch Steve Tirado, MCCC Instructor

XCA128-091039 Sept 22-Oct 13

4 sessions 6:30-9:30pm John Gontowicz, MCCC Instructor

# **Construction Change Orders**

In today's hectic design and construction process, with unforeseen conditions, it is ultra rare to find projects that do not require "Changes to Contracts" or Change Orders. Topics discussed include means and methods of preparing the Change Orders, scopes, pricing of work and methods of negotiation. Impacts of Change Orders on the Project Schedule/Completion will be reviewed. Also included are avoidance of claims, preparation of claims and their resolution.

1.5 CEU. Tuition and fees: \$157

XTC140-091062 Nov 4-Dec 16\* Th 6:30-9:30pm 5 sessions

\*Class will not meet Nov 11, 25 James Langsdorf, MCCC Instructor

## **Contract Law in the Construction Industry**

Discuss and examine public and private bidding procedures, the offer, counteroffer, acceptance, contract terms, negotiation, and finally the written contract and execution. We will examine construction contracts, letters of credit, letters of intent, bonds and disputes, change orders, amendments and common pitfalls. UCC provisions, remedies, breeches and resolutions will also be discussed.

1.0 CEU. Tuition and fees: \$105 XTC143-091063 Nov 9-Nov 30 4 sessions Tu 6:30-9pm Thomas Roselli, Esq.

## **BPI Certification: Building Analyst I Training**

Train to perform whole house energy audits with Building Performance Institute's (BPI) Building Analyst I certification. Understand the relationship between all the systems of the house and the effects on health, safety, comfort and efficiency. Gain knowledge of building science fundamentals, energy conservation strategies, heat loss calculations, and blower door testing. In this two-week training program, become skilled at how to find the cause of your customers' energy conservation problems and provide solutions that work. Fee includes written and field tests, scorings, as well as course materials, handouts and reference books.

6.0 CEU. Tuition and fees: \$1595 (\$400 tuition; \$1195 fees) (includes all materials, testing, scoring and reporting)

XTC135-090955 Oct 11-Oct 22 M-F 9am-4pm\* 10 sessions

\*1 hour lunch

Charles Goldate, Technical Services Manager, EAM Associates

## **BPI: Envelope/Shell Professional**

This training will give you a deeper understanding of the building envelope and its interaction with other building systems. This course offers hands-on measurement and verification of building performance, as well as installation techniques, standards and project specifications with the goal of optimizing the building envelope for energy efficiency. Building upon the foundation introduced in BPI Building Analyst I Training, BEP training participants will learn the skills needed to become a Building Envelope Professional. This class includes all fees for the BEP written and field tests.

4.2 CEU. Tuition and fees: \$1125 (\$225 tuition; \$900 fees) XTC136-091233 Oct 25-Nov 2 7 sessions M-F 9am-4pm\*

\*1 hour lunch

Charles Goldate, Technical Services Manager, EAM Associates

## **BPI: Heating Specialist Training**

The BPI Heating Professional Certification is intended for individuals wishing to comprehend heating systems and their interactions with other building systems. Using a whole-house approach, students will understand their installation, operation, and maintenance of heating systems while learning to measure and verify their performance. This course will teach techniques for improving the efficiency and durability of heating systems. Students will become familiar with best practices for heating system replacements and installations as well as for general heating system inspections. The training will prepare students to take the BPI Heating Professional written and field tests to acquire the certification. Testing and fees are included with the course.

6.0 CEU. Tuition and fees: \$1595 (\$1195 tuition; \$400 fees)

XTC138-091234 Nov 8-Nov 19 10 sessions 9am-4pm\*

\*1 hour lunch

Charles Goldate, Technical Services Manager, EAM Associates

## **Uniform Construction Code Program**

Experienced contractors who wish to become NJ Construction Code Enforcement Inspectors and Officials must complete a mandatory education program under the New Jersey Uniform Construction Code Act. MCCC has been approved by the NJ Department of Community Affairs (DCA) to offer the required courses intended for students seeking licensure in New Jersey to study NJ code standards.

After taking the required courses, contractors also need to pass National Exams. Students needing additional material and training for the national exams or with questions about requirements or textbooks should contact the DCA Licensing Unit at 609-984-7834 or www.nj.gov/dca/codes/licensingunit/ index.html or the publications office at 609-984-0040. The DCA has a program of reimbursement for a percentage of the cost of tuition for each course successfully completed, if funding is available.

The same textbook is used for all courses: New Jersey Uniform Construction Code. Please obtain textbook online at http://www.nj.gov/dca/codes. (Allow four to six weeks for delivery.)

Prerequisite: All course work within a particular discipline must be taken in the appropriate sequence (i.e., RCS, ICS, HHS).

#### **Building Inspector RCS**

This course covers the administrative, plan review and inspection requirements for structural, energy, radon, and mechanical systems applicable to Class III structures.

9.0 CEU. Tuition and fees: \$900

XTC108-091068 Sept 28-Dec 16\* 21 sessions Tu, Th 6-10pm 1 session \*Class will not meet Nov 11, 23, 25 Fayez Fanik, Construction Official

#### **Plumbing Inspector ICS**

This course covers the administrative, plan review, and inspection requirements for plumbing systems design, accessibility, fuel gas, and mechanical systems applicable to Class II and III structures. (Note: Please bring a lunch — cafeteria closed on

Saturday.) 12.0 CEU. Tuition and fees: \$1200

XTC116-091109 Sept 25-Mar 12\* 20 sessions Sa 9am-3:30pm \*Class will not meet Nov 27, Dec 25, Jan 1, 8, 15 Sibte Kazmi, P.E., Construction Official

#### **Electrical Inspector ICS**

This course covers the administrative, plan review and inspection requirements for electrical systems and design applicable to Class II and III structures. Required texts will be announced at the first class. Text: current National Electrical Code 6.0 CEU. Tuition and fees: \$570

XTC114-091112 Oct 4-Feb 21\* М 18 sessions 6:10-9:30pm \*Class will not meet Dec 20, 27, Jan 17 Kenneth Verbos, Construction Official

#### Subcode Official

Prepares inspectors for the administrative license of subcode official. Subcode administration, legal aspects of code enforcement, and related legislation are covered. Topics include procedures and forms for permit applications; stop construction orders: variations: notices of violation: emergency situations; and recordkeeping. Textbook: New **Jersey Uniform Construction Code. Please** obtain textbook online at http://www.nj.gov/ dca/codes. (Allow four to six weeks for delivery.) 4.8 CEU. Tuition and fees: \$480

XTC118-091069 Sept 15-Jan 5\* W 6-9:30pm\*\* 14 sessions

\*Class will not meet Nov 24, Dec 22, 29 \*\*Jan 5 class - 6-8:30pm Emile Kolick, MCCC Instructor

## **Uniform Construction Code Technical Assistant Certification**

This 45-hour course provides the educational requirement for state certification as a Technical Assistant. The Technical Assistant provides administrative support to the officials and inspectors within a local, county or state construction code enforcement office/agency. This course provides an overview to the administrative procedures in issuing permits, coordinating inspections, serving notices, stop work orders and violations, releasing various forms of Certificates, record keeping and state report generation, as well as other matters relevant to the efficient operation and public interfacing.

4.5 CEU. Tuition and fees: \$475 (includes computer lab fee)

XTC123-091070 Sept 30-Feb 24\* 18 sessions 6:30-9pm 1 session \*Class will not meet Nov 11, 25, Dec 23, 30 Brenda Sirkis, Certified Technical Assistant

#### **Green Jobs**

If you are looking for a new career path, or want to apply existing skills towards the field of Sustainability, this seminar will provide useful information on jobs in a variety of fields from green building through finance, public policy, sales and facilities management. 0.2 CEU. Tuition and fees: \$35

XTC130-091064

Oct 21 1 session Sunil Tewarson, LEED® AP, IEEE, ASHRAE, USGBC, AEE

Landscape Design. **Estimating and Management** 

This course is intended for you if you are a landscape professional working in the landscape design/building industry who would like to improve your skills in the areas of design, estimating and management. Over the course of 12 weeks, you will learn how to:

- Develop, present and sell a landscape design
- Project and calculate the associated costs to do the work while making a profit
- · Manage a project by planning the daily administration and site supervision to ensure project completion within a budget

7.2 CEU. Tuition and fees: \$562 (tuition: \$499; fees \$63) XPE131-090984 Sept 14-Dec 14\*

Tu,Th 5:30-8:30pm 24 sessions \*Class will not meet Nov 11, 23, 25 Bob Knoff, Landscape Architect

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