



NC STATE UNIVERSITY

Credential Your Career

with a reputable diploma
in as few as 2 MONTHS!



Announces the Fall 2013

Construction Project Management Diploma

Earned through a Series of Basic Seminars for
Construction Professionals

Earn your diploma by completing 5 course offerings.

1. **Fundamentals of Blueprint Reading and Quantity Takeoffs** August 19, 2013
2. **Fundamentals of Construction Contracts, Contract Review, and Risk Management** August 26, 2013
3. **Fundamentals of Construction Business Costs, Project Estimating, Bidding, and Change Order Management** September 9, 2013
4. **Fundamentals of Construction Scheduling and Project Progress Controls** September 16, 2013
5. **Fundamentals of Construction Accounting, Finance, and Cash Flow Management** September 23, 2013

McKimmon Conference and Training Center
North Carolina State University, Raleigh, NC

Attend and You Will

- Obtain a solid foundation of current principles and practices of construction project management
- Earn a respected diploma that will enhance your skills and construction career
- Enjoy the benefits of personalized and interactive teaching while networking with experienced construction professionals

Offered twice per year!

Save \$250 when you
register for all five
classes in one semester!

"I gained knowledge of
local markets as well as
technical information.
It was as if I had signed
up for an 8-hour MBA!
Excellent!"

—Vicki Misenheimer,
Business Development Manager,
Diamond Water,
High Point, NC

Register Today! Class size is limited to 35

For more information email us at ContinuingEducation@ncsu.edu

Register on-line at
go.ncsu.edu/construction

Call 919.515.2261

Fax 919.515.7614

Complete and mail the
enclosed registration form

The
McKimmon
CONFERENCE & TRAINING CENTER

Civil, Construction,
and Environmental
Engineering



Extension
Services Group



Recent Construction Project Management Diploma recipients pose with Roberto Nuñez (front row, far left) and Jeffrey Parsons (front row, far right) for a graduation photo.

“Great learning experience. Anyone in a construction supervisory position should take the class.”

Gene Hill, Safety Director,
Daly Seven, Inc.,
Winston-Salem, NC



Dr. Michael Leming (standing) interacts with students during classroom exercise.

What Makes This Diploma Program Unique

North Carolina State University has established this diploma program to give you, the construction professional, the knowledge and skills you need to help your firm operate more efficiently and profitably. You'll receive your Construction Project Management Diploma upon successful completion of five one-day courses and demonstration of proficiency of the subject matter. These short modular courses focus on the fundamental principles of construction engineering and management. The classes do not have to be taken in sequence, but you must complete all five courses within one year and demonstrate your proficiency of the subject matter.

The NC State University Construction Project Management Diploma

will provide you with an excellent means of credentialing and will demonstrate that you have been exposed to and have gained knowledge of the essential skills needed in construction engineering. While not a degree or a specific certification of your qualifications, earning the diploma represents solid evidence of your successful completion of the course requirements and illustrates your dedication to becoming more knowledgeable in your field.

Earn your diploma today!

- Take 5 classes and demonstrate your proficiency of the subject matter to earn your diploma.
- All classes focus on fundamental principles for the construction practitioner.

To ensure personalized instruction, class size is limited to a maximum of 30 participants.

Class Fee:

\$1,495 (\$299 per class) if all five classes are taken within a single semester

\$349 per class when you take individual classes or complete all five classes over two semesters

Who Should Attend

- Owners
- Architects
- Engineers
- Estimators
- Facility managers
- Contractors
- Subcontractors
- Project managers
- Program managers

1. Fundamentals of Blueprint Reading and Quantity Takeoffs

Monday, August 19, 2013

8:00 a.m. - 5:00 p.m.

"The course was very informative and will definitely enhance your knowledge concerning blue print reading."

—Anthony Nelson, Section Chief, Division of Marine Fisheries, Morehead City, NC

Why You Should Attend

Often construction professionals have difficulty interpreting information and/or visualizing the details contained in construction drawings, also called "blueprints." Unless you are frequently exposed to construction drawings, translating two-dimensional images into a three-dimensional (3-D) structure can be a difficult process. This problem can be simplified by understanding the language of "blueprint" reading.

You will leave this course with a basic understanding of the "blueprint" language so you can

read, interpret, and visualize 3-D components, structures, and facilities from information contained in a typical construction drawing. In developing these skills, you will be provided with quantity take-off examples for residential and commercial building construction.

Attend and You'll Learn

The Construction Language

- Views and scales
- Symbols
- Elevations
- Sections and details
- Quantity takeoff basics

Drawing Types

- Civil
- Architectural
- Structural

- MEP

Project Changes and Shop Drawing Strategy

Drawings vs. Specifications

Who Should Attend

- Contractors
- Project managers
- Designers
- Tradesmen/field staff
- Engineers

Attend and You'll Receive

- Valuable program and reference materials
- 8 PDHs/8 LUs
- A networking luncheon and breaks
- A Certificate of Attendance

2. Fundamentals of Construction Contracts and, Contract Review, and Risk Management

Monday, August 26, 2013

8:00 a.m. - 5:00 p.m.

"This class was helpful in understanding technical contract details."

—Dennis Hall, Project Manager, Daly Seven, Inc., Winston-Salem, NC

Why You Should Attend

The fast pace of the bidding and award phase of a typical construction project, along with the amount and complexity of construction documents, often preclude contracting parties from performing a thorough review and/or gaining a complete understanding of construction contracts. This situation enhances the potential for conflict and loss.

In this seminar you'll study the basic rules of contract review and administration including tools for risk management and avoiding

litigation. You will develop a solid understanding of the importance of documentation, change order management, and control mechanisms.

This practical workshop is aimed at construction professionals involved in negotiating and/or managing construction contracts, including those involved in claims and litigation.

Attend and You'll Learn

- Contract phraseology—what exactly you are agreeing to do
- Which contractual clauses can work against you and what you can do to remediate/change your exposure
- Liabilities of contractors and design professionals

- Lien mechanisms, stop notice, and termination requirements
- Subcontractors and subcontracts
- Bid, performance, and payment bonds
- Contractor's license law
- Mediation, arbitration, and court trials for dispute resolution
- Potential indemnification

Attend and You'll Receive

- Professional instruction
- Reference notes
- 8 PDHs/8 LUs
- Networking luncheon and breaks
- A Certificate of Attendance

3. Fundamentals of Construction Business Costs, Project Estimating, Bidding, and Change Order Management

Monday, September 9, 2013

8:00 a.m. - 5:00 p.m.

“Course was excellent for general contractors-very interesting.”

—Rose Greene, Asset Manager,
The Dilweg Companies, Durham, NC

Why You Should Attend

The owner’s/engineer’s budget estimate is often inconsistent with the awarded contractor’s bid. Contractor–awarded bids are not necessarily profitable. In this course you will learn how to produce more reliable and realistic construction cost estimates that maintain owners’ and contractors’ cost expectations within acceptable and realistic ranges to minimize the potential for conflict and maximize the project’s quality and profit objectives for all parties.

This practical, hands-on workshop helps contractors, subcontractors,

construction managers, architects, and engineers develop winning bids and more reliable construction estimates.

Attend and You’ll Learn

- Calculating and allocating your own company overhead
- Estimating project general conditions
- Setting profit goals, allowances, and contingencies
- Developing an adequate mark-up and pricing structure for change orders
- Basic estimating and bidding procedures
- A review of the CSI format
- Proper use of estimating aids and estimating references

- Using productivity factors
- How to produce a reliable quantity takeoff
- Pricing labor, materials, equipment, and subcontractors
- Estimating bonding and insurance costs

Attend and You’ll Receive

- Professional instruction
- Reference notes
- 8 PDHs/8 LUs
- Networking luncheon and breaks
- A Certificate of Attendance

Prerequisite

Basic knowledge of construction blueprint and plan reading.

4. Fundamentals of Construction Scheduling and Project Progress Controls

Monday, September 16, 2013

8:00 a.m. - 5:00 p.m.

“As an owner, the course gave me insight into the contractor’s side of construction. The data and information on profit and cash flow will help me evaluate contractor quotes and proposals.”

—Tim Winslow, Facilities Manager,
City of Chesapeake, Chesapeake, VA

Why You Should Attend

Once a project is awarded, a repetitive process of information management is triggered. The process starts with a plan that, as the project progresses, is updated, changed, and influenced by a number of players. In this course you will learn an efficient mechanism to plan the project continuously, to manage resource utilization, and to communicate results efficiently to complete projects within time, cost, and resource constraints.

This practical workshop is ideal for all members of the project team who share information and/or participate

in a construction project, including owners, architects, engineers, project managers, contractors, subcontractors, and suppliers. At the end of the course you will have the tools to effectively plan, schedule, and control a construction project.

Attend and You’ll Learn

- An overview of project planning and scheduling concepts
- A systems approach to planning and scheduling
- Developing a work breakdown structure (WBS)
- Selecting meaningful activities for scheduling purposes
- Calculating activity durations
- Establishing a logical sequence of activities
- Manual and computerized tools for project scheduling
- Preparing information to set a computerized scheduling network

- Network analysis
- Developing a baseline schedule
- Controlling, updating, and adjusting the schedule
- Developing a project schedule of payments and cash flow
- How to perform a earned value method for controlling the status of a project

Attend and You’ll Receive

- Professional instruction
- Reference notes
- 8 PDHs/8 LUs
- **Approved for AIA-CES credit**
- Networking luncheon and breaks
- A Certificate of Attendance

Prerequisite

Familiarity with basic construction operations and processes, and ability to use computers and create simple spreadsheets.

5. Fundamentals of Construction Accounting, Finance, and Cash Flow Management

Monday, September 23, 2013

8:00 a.m. - 5:00 p.m.

"This course was very helpful in giving me tools to assess the financial strength of my company that will help to improve efficiency in the office and on the jobsite."

—Brandon Alexander, Senior Project Manager, Bullock Properties, Raleigh, NC

Why You Should Attend

Traditional accounting and financial management principles do not fit the construction process. In this course you will learn *construction-specific* financial principles to finance, invest, and operate a construction project efficiently in a profitable manner that results in adequate returns while providing an opportunity for future company growth.

This practical workshop is aimed at small and medium-size contractors, construction professionals, and project managers with profit/loss responsibility for a company or a construction project.

Attend and You'll Learn

- Basic accounting methods for contractors
- Understanding construction financial statements: income statement and balance sheet
- Practical financial metrics for contracting performance evaluation
- Cash flow statement: project vs. company
- Utilizing cost-volume-profit analysis for business decisions

- Calculating a "true" return on investment for a project and for your company
- Developing a work in progress (WIP) report
- Equipment buying/leasing decisions
- How to play the construction cash flow game to benefit your company

Attend and You'll Receive

- Professional instruction
- Reference notes
- 8 PDHs/8 LUs
Approved for AIA-CES credit
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Meet Your Instructors

Dr. Michael L. Leming is an Associate Professor in the Department of Civil, Construction and Environmental Engineering at North Carolina State University and a Fellow of the American Concrete Institute. Dr. Leming has been the Principal Investigator/Co-Principal Investigator for over 30 research projects and is the author/co-author of over 40 journal articles, conference papers, symposia proceedings, peer reviewed reports and invited articles. Dr. Leming was employed by a large and diversified construction company in Colorado, and spent 6 years in the U.S. Army. He is an active construction consultant, providing comprehensive seminars and lectures in topics related to construction engineering and management, construction materials, and construction forensics.

Roberto A. Nuñez, PE, MBA, is a Lecturer of Civil Engineering and a Senior Construction Extension Specialist with the Department

of Civil, Construction and Environmental Engineering at North Carolina State University. He is a structural and construction engineer with more than 20 years of international experience in civil infrastructure in the private and public sectors. Mr. Nuñez is the director of business development for NC State University's Constructed Facilities Laboratory, working to link NC State University research and testing resources with private and public organizations in need of product development, compliance, and certification. He is a Registered Professional Engineer in NC, SC, MI, and Ecuador, South America.

Jeff Parsons, Esq. is a Senior Contracts Manager in the Office of Shared Services, Contracts and Procurement Department at Parsons Corporation. He is responsible for the review, drafting, negotiation, and administration of various contractual instruments for Parsons. Mr. Parsons graduated from the

University of North Carolina at Chapel Hill with Highest Honors in 1985 and the University of North Carolina, School of Law in 1988. Prior to starting with Parsons in 2007, Mr. Parsons was a Special Deputy Attorney General with the North Carolina Department of Justice in its public contracts section. While Special Deputy Attorney General, he represented the North Carolina Department of Administration, State Construction Office and drafted the State of North Carolina's first form CM at Risk procurement and contract documents. Mr. Parsons was also in private legal practice for a number of years, most recently as a partner in Conner Gwyn Schenck PLLC in Raleigh, NC. While in private legal practice, he specialized in construction litigation representing both contractors and owners. Mr. Parsons is also a certified Superior Court Mediator and lectures on contract law at NC State University and the Charlotte School of Law.

Course Schedules and Locations

Unless otherwise noted, check-in will take place from 7:30 - 8:00 a.m. with class from 8:00 a.m. until 5:00 p.m. each day. Luncheons and refreshment breaks are included in the registration fee. All courses will take place at the McKimmon Conference & Training Center located at the corner of Western Boulevard and Gorman Street on the NC State University campus in Raleigh, NC.

You will receive a map, cancellation policy, and hotel information with your confirmation via email. Depending on your Internet service provider and/or your personal email settings, emails from NC State University in regard to this registration process may be considered unsolicited and not be delivered to your inbox. If you do not receive an email confirmation from NC State University, please check your spam file if you have one, or you may contact us at **919.515.2261** with any questions about your registration status.

Where to Stay

For detailed lodging information please visit our website at go.ncsu.edu/hotels or call **919.515.2261**.

Guarantee of Satisfaction

We realize how valuable your time and money are and that you and your organization expect to get a return on your investment. We will make every effort to make sure that your learning experience is satisfactory.

Credits You Can Earn

Individuals satisfactorily completing each course will be eligible for Professional Development Hours (PDHs) and AIA (American Institute of Architects) Learning Units (LUs).

For more information on these credits and how to obtain your record, please visit our website at ContinuingEducation.ncsu.edu or call **919.515.2261**.

If you are a person with a disability and desire assistive devices, services, or other accommodations to participate in these programs, please contact us at **919.515.2261** or email ContinuingEducation@ncsu.edu at least two weeks prior to the program.

How to Enroll



On-line at
go.ncsu.edu/construction



Call **919.515.2261**



Fax your registration
to **919.515.7614**



Mail to
Registration Coordinator
NC State University
Office of Professional
Development
Box 7401
Raleigh, NC 27695-7401



For more information email
ContinuingEducation@ncsu.edu

Also Available to You!

ACI/NCDOT Concrete Field Technician Grade I Certification Choose among 6 sets of dates!

June 19-21, 2013 | July 24-26, 2013 | August 21-23, 2013

September 18-20, 2013 | October 16-18, 2013 | November 13-15, 2013

NC State University teaches this course following the same format established by the NCDOT for training and certification of ACI and NCDOT Grade 1 Concrete Field Technicians. The course has a duration of three days. During the first two days, you will learn concrete technology fundamentals in accordance to NCDOT and ACI concrete testing requirements. The third day is dedicated exclusively to both performance (field) and written examinations. You are required to obtain a passing grade on both written and field examinations in order to obtain

ACI and NCDOT certifications. Classroom instruction and written examinations will be held at the NC State University campus; the location will vary and you will be properly informed prior to the class. The performance examination is held at the NC State University Construction Facilities Laboratory (CFL) located on the NC State University Centennial Campus. The CFL offers a controlled environment which allow this course to be held continuously throughout the year. A location map for the CFL can be found at <http://centennial.ncsu.edu/contact/zoommap2.pdf>.

The classes will be limited to 25 students on a first-come, first-serve basis. Advance payment is required for registration. When you register, and within one week from the class, you will receive a copy of the *NCDOT Concrete Field Technician Study Guide* and a copy of the latest *ACI Concrete Field Technician Grade 1 Workbook CP-07*. For more information or to register, go to go.ncsu.edu/concrete or call **919.515.2261**.

Course Fee
\$575 per person

Registration Form — Fall 2013 Construction Project Management Diploma

Check Courses

- Fundamentals of Blueprint Reading and Quantity Takeoffs..... August 19, 2013..... OPD-ELCONBLUE-N-001
- Fundamentals of Construction Contracts , Contract Review, and Risk Management..... August 26, 2013..... OPD-ELCONTRACT-N-001
- Fundamentals of Construction Business Costs, Project Estimating, Bidding, and Change Order Management..... September 9, 2013 OPD-ELCONCOSTS-N-001
- Fundamentals of Construction Scheduling and Project Progress Controls..... September 16, 2013..... OPD-ELCONSCHED-N-001
- Fundamentals of Construction Accounting, Finance, and Cash Flow Management..... September 23, 2013..... OPD-ELCONCASH-N-001

Class Fee: \$1,495 (\$299 per class) if all five classes are taken within a single semester
\$349 per class when you take individual classes or complete all five classes over two semesters.

Priority Code

F 1 3 0 2 W B

Note: To help us serve you better, please enter the priority code from your mailing label. Enter this code even if label is addressed to someone else. *Thank you!*

First Name _____ Middle Initial _____ Last Name _____

Date of Birth* _____ Title _____

Badge Name _____ (If different from above)

Company _____

Work Address _____

City _____ State _____ Zip _____

Work Phone _____ Fax _____

Email _____

Name and Title of Manager Approving Your Training _____

Please duplicate this form for multiple registrations. You may want to make a copy for your records.

* In lieu of SSN, your date of birth is required as a personal identifier for internal record keeping by this university.

Method of Payment

Payment must accompany registration and must

be received by the first day of the program.

Payor: Company Individual

Please check one:

The easiest way to guarantee your place is to pay with a credit card.

Credit Card Information

Visa MasterCard
 American Express Diners Club
Corporate Card: Yes No

Card # _____

Expiration Date _____

Amount \$ _____

Cardholder's Name (please print) _____

Signature (required) (seal) _____

Check Enclosed (U.S. banks only)
(do not fax)
Make check(s) payable to

North Carolina State University

Please write the name(s) of the participant(s) on the face of your check(s).

If you wish to pay by purchase order, please submit your purchase order and this registration form by mail or fax them to 919.515.7614.

IDT (NC State University employees only)

Project (FAS) # _____

NC State University Announces the **Fall 2013** Construction Project Management Diploma Earned through a Series of Basic Seminars for Construction Professionals

McKimmon Conference and Training Center
North Carolina State University, Raleigh, NC



NC STATE UNIVERSITY

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