



## Energy Management Certificate Program

[go.ncsu.edu/emdp](http://go.ncsu.edu/emdp)

"The program broadened my knowledge of energy management and enlightened me with new ways to approach problems I may encounter in the future."

—Marty Bulloch,


*BMS Specialist, SAS Institute, Angier, NC*

In Affiliation with



# Credential your career

with an industry recognized professional diploma and  
Professional Energy Manager (PEM) certification.



To bring  
this program to  
your employees, contact  
Customized Training and Development at  
**919.513.5080** or [andrew\\_billingsley@ncsu.edu](mailto:andrew_billingsley@ncsu.edu)

## CELEBRATING 44 YEARS OF SUCCESS!

Join more than 1,000 graduates from around the world who have benefited from the most comprehensive energy management training program available today.



As a student in the NC State University Energy Management Diploma Program, you'll learn from the most experienced, hands-on energy professionals available. Your instructional team trains some of the most successful energy managers in the world.

This comprehensive, convenient, and cost-effective, three-part program, the modules of which can be taken in any order, will provide you with a hands-on, practical, real-world energy management education leading to your professional diploma. Earning this non-degree diploma represents solid evidence of your successful completion of the course requirements and illustrates your dedication to becoming more knowledgeable in your field and valuable to your organization. This can be done in less than one year!

## Earn Your Professional Diploma

Upon completion of the three-week program, you will qualify to take a comprehensive course examination developed by the **Institute of Energy Professionals**. By successfully completing the exam, you will earn the **Professional Energy Manager (PEM)** certification in addition to receiving your program diploma from the university.



**Earn 32 PDHs per one-week session**

"This course was a great experience for me. I am fairly new to this field and appreciate the mass amounts of information that the instructors were able to give me. This has helped further my knowledge and expose me to things I wasn't familiar with to aid in understanding and growth in my field."

— Brooke McNeill,  
Randolph Electric Membership Corporation,  
Asheboro, NC

To bring this program to your employees, contact Customized Training and Development at  
**919.513.5080** or **andrew\_billingsley@ncsu.edu**.

## EM 1

### Managing Energy for Greater Profitability

#### Attend and You Will Learn\*

- The national energy landscape
- Energy legislation (codes and standards)
- Electric utility rates
- What makes an effective energy management program
- Renewable energy overview
- Procurement of fuels
- Strategic energy planning
- Energy calculations
- Metrics - analyzing energy information
- Energy surveying and instrumentation
- Economic analysis techniques
- Corporate culture in EM
- Survey planning
- How to establish an effective energy management program
- Techniques for working with people

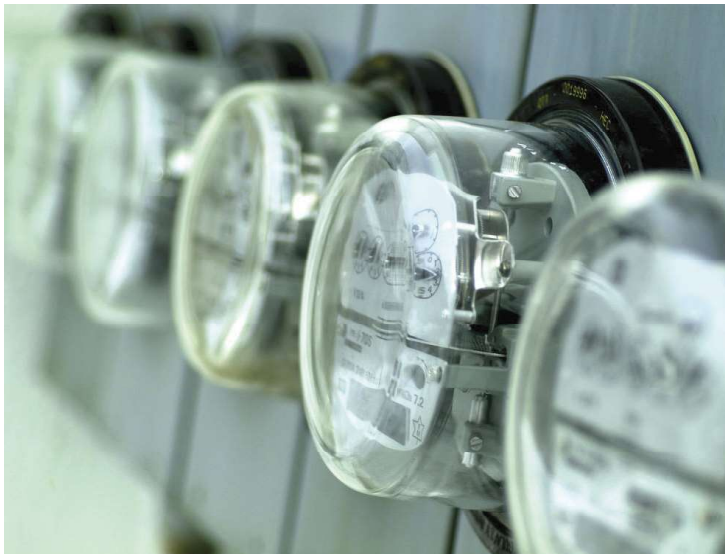


## EM 2

### Improving Equipment Efficiencies

#### Attend and You Will Learn\*

- Compressed air systems
- Energy-efficient lighting
- Boilers and steam systems
- Thermal energy storage
- Fundamentals of HVAC systems
- Chillers/cooling towers
- Electric motors and power quality
- Building automation and EMS



## EM 3

### Industrial and Commercial Energy, Process and Building Analysis

#### Attend and You Will Learn\*

- Building envelope analysis
- Industrial and commercial ventilation
- Geothermal heat pump
- Process energy analysis/cogeneration
- DDC controls specifications, procurement, and commissioning
- Hydronic systems
- High-performance building envelopes

\* **NOTE: See the individual course page online for a more complete description of the course. Session content is continually updated.**



## Who Should Attend

- Facility energy managers
- Maintenance supervisors/personnel
- Manufacturing plant operations personnel
- Manufacturer's representatives for energy-consuming equipment and controls
- Utility customer interface personnel
- Military base operations personnel
- Major oil and natural gas companies with facilities to maintain
- University/college facility managers
- K-12 school system maintenance managers
- Federal, state and local government personnel responsible for facility operations
- Consultants/engineers

## Benefits of Attending

- Enhance your knowledge of the energy management field.
- Prove your knowledge and competence in your field.
- Set yourself above most of your peers, leading to advancements in positions and earnings.
- Earn a diploma from a distinguished university.
- Join a select group of personnel in the energy field.
- Gain exposure to current and emerging trends in energy management.
- Provide the credential to your employer or prospective employer to show that you have the in-depth knowledge to be an effective energy manager.

## Your Instructional Team

### Director:

**Walter Bright**, P.E., PEM, President, Institute of Energy Professionals, Inc., 12 years of energy and building automation experience

### Director Emeritus:

**Dan Mull**, P.E., PEM, CEM, Director Emeritus, Institute of Energy Professionals, Inc., over 40 years of electrical utility and energy management experience

### Instructors Include:

**Francis Conlin**, P.E., Senior Engineer, High Performance Building Solutions

**Jamie Edmondson**, President, James M. Pleasants Company, Inc.

**Tom Fenimore**, P.E., PEM, CEM, Technology Development Director, Duke Energy

**Doug Gunnell**, P.E., PEM, HVAC Consultant, former head of HVAC for a major manufacturer

**Greg Harrell**, Ph.D., P.E., PEM, CEM, Director of Engineering Programs, Milligan College

**Roger Lawrence**, P.E., CEM, FIEEE, Independent Consultant

**Charles A. Martin**, P.E., PEM, CEM, Senior Energy Engineer - Advanced Energy

**Jay Santos**, P.E., Partner, Facility Dynamics Engineering

**Bill Turpish**, P.E., PEM, CEM, President of W.J. Turpish and Associates

To bring this program to your employees, contact Customized Training and Development at  
**919.513.5080** or [andrew\\_billingsley@ncsu.edu](mailto:andrew_billingsley@ncsu.edu).