

"This week of training has helped me to see the reality of where we are as a maintenance organization and where we need to improve to become a world-class organization."

*— Monte Dixon,
Maintenance Planner and Scheduler,
Savannah Airport Commission, Savannah GA*

The **ADVANCED DIPLOMA** in **MAINTENANCE & RELIABILITY MANAGEMENT**

This prestigious diploma provides you with the most hands-on, practical, and cutting-edge maintenance and reliability management education.

- Three one-week modules leading to an advanced Diploma in Maintenance and Reliability Management
- Continue to develop your professional career at NC State University
- Join hundreds of satisfied graduates from similar programs at NC State University
- One of the few programs of its kind in the United States
- Designed for working professionals
- Can be completed in less than one year
- Opportunity to take the CMRP exam

NEW STUDENTS ENROLL NOW!

Take these three sessions in any sequence you choose.

MRM I: April 4–8, 2011

MRM II: September 19–23, 2011

MRM III: January 23–27, 2012



**McKimmon Conference &
Training Center
NC State University, Raleigh, NC**

Brought to you by



Marshall Institute

In Affiliation with



**REGISTER TODAY! On-line at ContinuingEducation.ncsu.edu, Call 919.515.2261,
or Fax your registration form to 919.515.7614.**

The **ADVANCED DIPLOMA** in **MAINTENANCE & RELIABILITY MANAGEMENT**



Recent Maintenance & Reliability Management Diploma students in a class photo with instructor Dale Blann (second row, fifth from right).

About the Diploma Program

NC State University and Marshall Institute provide you with this comprehensive three-week diploma program that will develop your maintenance and reliability knowledge and sharpen your leadership skills for today's increasingly competitive global marketplace. You will be exposed to real-world examples and provided with practical knowledge and skills applicable in your plant or facility. Earning this diploma will represent solid evidence of your successful completion of the course requirements and will illustrate your dedication to become more knowledgeable in the field of maintenance and reliability management.

Why You Should Attend

The challenges facing you in today's modern process and manufacturing industries are complex and asset intensive, requiring you to know how to maintain them in a manner that maximizes uptime while minimizing operational costs. In addition, your plant and facility must be maintained so that process safety and asset integrity are not compromised. As a well trained maintenance and reliability professional, you'll be prepared to accomplish these objectives and more!

NOTE: The weekly sessions *do not* have to be taken in sequence but you must complete all the requirements within a three-year period from the first module you take.

Special Benefits to You

- Develop your personal knowledge and greatly increase your value to your organization
- Earn your diploma from a distinguished university
- Receive the Maintenance and Reliability Management Diploma upon successful completion of three, one-week modules on maintenance, reliability, and engineering management
- Gain exposure to current and emerging trends in maintenance and reliability as it relates to process and manufacturing industries
- Provide the credentials to your employer or prospective employer demonstrating that you have the managerial knowledge for today's maintenance and reliability profession
- Network with other maintenance and reliability professionals
- Take the CMRP exam

What Makes This Program Unique

- Taught in a university environment dedicated to the continuing development of working professionals
- Delivered by experienced maintenance and reliability professionals from Marshall Institute Inc.
- Flexible course designed for the working professional

Pre-course assignments will be required upon enrollment for each module. A test will be administered at the end of each module. After successful completion of the program, you'll be awarded a diploma from the Office of Professional Development at North Carolina State University and Marshall Institute. In addition, you will receive an opportunity to sit for the Society for Maintenance and Reliability Professionals' certification or the CMRP exam.

Who Should Attend

- Operations vice presidents and managers
- Production vice presidents and supervisors
- Engineering vice presidents
- Maintenance directors, managers, supervisors, engineers, superintendents and personnel
- Reliability managers and engineers
- Manufacturing managers
- Storeroom managers
- Continuous improvement managers
- TPM coordinators
- Plant engineers
- And anyone whose job involves safely and reliably maintaining a process or manufacturing operation

REGISTER TODAY! On-line at www.Continuu



MRM I:

Strategic Leadership, Planning and Control

April 4–8, 2011

Areas of Concentration

- Strategic Maintenance Leadership
- World-Class Maintenance
- Total Productive Maintenance/Total Process Reliability

Attend and You Will Learn

- A comprehensive maintenance and reliability framework
- Key elements of a world-class maintenance and reliability program
- What it takes to become world-class
- Fundamentals of change management
- Implementation strategies
- How to develop a business strategy
- Leadership principles for managers in operations, maintenance and engineering
- Budgeting fundamentals

MRM II:

Work Flow and Materials Management

September 19–23, 2011

Areas of Concentration

- Maintenance Planning and Scheduling
- Storeroom Control
- Lean Maintenance
- Measures and Metrics

Attend and You Will Learn

- Integration of the computerized maintenance management system (CMMS) and the work processes
- Work preparation and planning
- How to schedule maintenance activities
- Implementation of an effective and efficient storeroom operation
- Tools for identifying waste in work processes
- Equipment criticality analysis and work prioritization
- How to measure maintenance processes

MRM III:

Risk and Reliability Management

January 23–27, 2012

Areas of Concentration

- Preventive/Predictive Maintenance
- Reliability-Centered Maintenance/PM Optimization
- Maintenance Prevention/Reliability Engineering

Attend and You Will Learn

- The concept of risk as it relates to maintenance and reliability
- Risk and reliability strategies for your plant or facility
- Principles and techniques of condition-based maintenance
- Maintenance strategy optimization techniques
- Design for reliability and early equipment management concepts
- Reliability statistics for managers
- Root cause analysis concepts and tools

Individual sessions may be taken in any sequence you choose. The Maintenance and Reliability Program must be completed within three years from the date of the first class.

What MRM Students Have Said About the Course . . .

“The course content was helpful to me in providing meaning to a lot of initiatives and programs that my company practices but for which little or no training or explanations were provided.”

–Edward Watkins, Outage Planning and Scheduling Manager, New York Power Authority, Lewiston, NY

“MRM II provides you with valuable tools to help improve your maintenance organization. Real-world examples show how the ‘rubber meets the road’ in applying these principles.”

– Christopher Payne, Process Improvement Engineer, Bush Brothers & Company, Dandridge, TN

“The material presented is relevant and can be immediately applied to improve our maintenance effectiveness.”

– James Robertson, Manager, Engineering and Maintenance, Lanxess Corporation, Goose Creek, SC

Also Offered by Marshall Institute, Inc.

- Achieving Total Process Reliability Through TPM
- Planning & Scheduling
- Supervising Maintenance
- Preventive/Predictive Maintenance
- Sustainable Solutions to Storeroom Operations
- ...and more

Instruction Provided by Marshall Institute, Inc.

Marshall Institute is a consulting and training company dedicated to helping clients improve the maintenance contribution to organizational performance. For over 35 years, Marshall Institute has provided world-class consulting and training services, staffed by experienced, knowledgeable seminar leaders, consultants, and training professionals, to produce tangible, measurable results.

Dale R. Blann, PE, Principal/CEO

Gregory L. Folts, President/CMRP

Andy Gager, Business Unit Manager/CMRP

Tracy T. Strawn, Vice President International Programs/CMRP

Henry Bardel, Senior Consultant

Mark Jolley, Senior Consultant

Mark Pond, Senior Consultant

Glenn Smith, Senior Consultant

“Excellent course, I would highly recommend it.”

– Raymond Jackson,
RockTenn, Milwaukee, WI



Raymond Jackson (right), with RockTenn, receives his MRM Diploma from Andy Gager (left), Business Unit Manager/CMRP of Marshall Institute, Inc.

Location of the Program

All sessions take place at the McKimmon Conference & Training Center, conveniently located on the NC State University campus at the corner of Western Boulevard and Gorman Street in Raleigh, NC. Driving to the campus is easy and public parking is plentiful.

Following your enrollment, you will receive a confirmation letter by e-mail with detailed instructions, driving directions, a receipt or invoice, and a map of the Raleigh area.

Where to Stay

Lodging and evening meals are not included in your registration fee.

Sleeping accommodations are available at several hotels convenient to the McKimmon Center, but please note that these hotels are not within walking distance.

For lodging information, please visit our website at:

ContinuingEducation.ncsu.edu or call **919.515.2261**.

Depending on your Internet service provider and/or your personal e-mail settings . . .

e-mails from NC State University in regard to this registration process may be considered unsolicited and not be delivered to your in-box. If you do not receive an e-mail confirmation from NC State University within five business days, 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.

For more information, you can also visit our website at **ContinuingEducation.ncsu.edu** or call **919.515.2261**.

If you are a person with a disability...

and desire any assistive devices, services or other accommodations to participate in these courses, please call **919.515.2261** during business hours (8 a.m. to 5 p.m. EST) or **ContinuingEducation@ncsu.edu** to discuss accommodations at least two weeks in advance.

Credits You Can Earn

Individuals satisfactorily completing each course will be eligible for 4.0 CEUs and 40 PDHs. For more information, please visit our website at: **ContinuingEducation.ncsu.edu** or call **919.515.2261**.

Your 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 promise that you will be completely satisfied with your learning experience or we will make it right—guaranteed!

Your registration fee includes...

all class materials in a MRM diploma tote bag, lunches and breaks.

Bring These Topics On-Site

Arrange to have topics from these courses presented at the location of your choice.

Benefits Include

- Custom-tailored instruction
- Convenience
- Substantial savings over public prices if you train 10 or more of your people

Contact Andy Billingsley at

919.513.5080 or **Andrew_Billingsley@ncsu.edu** for more information.

Registration Information

The Advanced Diploma in Maintenance Reliability Management

McKimmon Conference & Training Center • NC State University • Raleigh, NC
Check course(s) you will be attending:

- | | | | | |
|--------------------------|----------------|------------------------------|-------------------------|------------------|
| <input type="checkbox"/> | MRM I | April 4–8, 2011 | \$1,995/\$1,795* | MMRMDS11/MRM1S11 |
| <input type="checkbox"/> | MRM II | September 19–23, 2011 | \$1,995/\$1,795* | MMRMDF12/MRM2F12 |
| <input type="checkbox"/> | MRM III | January 23–27, 2012 | \$1,995/\$1,795* | MMRMS12/MRM3S12 |

LOWER TEAM DISCOUNT! * \$1,795 for each additional registration from the same organization and for government employees.

Save \$\$\$ when you pre-register and pay for all three sessions!!
Call 919.515.2261 for details.

Your Priority Code **S 1 1 2 0 W B** To help us serve you better, please enter the 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 _____

Organization _____

Work Address _____

City _____ State _____ Zip _____

Telephone _____ Fax _____

E-mail _____

Name, Phone Number & E-mail of Your Approving Manager _____

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

- I wish to take the CMRP exam (Exam fee is a separate cost) Please email Rinnette Lowder at **RLowder@Marshallinstitute.com**, for more information.

How to Enroll



On-line...

ContinuingEducation.ncsu.edu



Call...

919.515.2261

Fax...

Your registration to:

919.515.7614



Mail...

Your registration to:

Registration Coordinator
Office of Professional Development
North Carolina State University
Box 7401 • Raleigh, NC 27695



For More Information

E-mail...

ContinuingEducation@ncsu.edu

Method of Payment

Payer: Company Self

Payment must accompany registration and must be received by the first day of the program.

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

Please charge my credit card

American Express

VISA

MasterCard

Diners Club

Corporate Card Yes No

Account # _____ (Please list all numbers)

Exp. Date _____

Security Code _____

Amount Charged \$ _____

Cardholder's Name (please print) _____

Cardholder's Signature (required) (Seal) _____

- Check Enclosed (U.S. banks only)
(Do not fax)

(Payable to NC State University)

Write the name(s) of the participant(s) on face of the 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**.

MI (Marshall Institute employees only)

IDT (NC State University employees only)

OUC # _____

Project (FAS) # _____

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If you receive more than one brochure, please pass the extra along to an associate. If addressee is no longer employed, please forward to his/her replacement. Call 919.515.2261 to update your record.

Attention: Mail Room Personnel
Please re-route if necessary! Thank you!

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"Very informative; this class information will be a great asset to use in my job. Very beneficial."

— Gene Bass, Reliability Engineer,
Merck, Wilson, NC

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