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Inside DoD

Training for DoD's Acquisition Community Continues to Expand

View the Latest Course Opportunities Here

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When it comes to preventing corrosion, the mantra of the DoD corrosion community is training. Officials in the DoD Corrosion Office are working hard to ensure that new corrosion-mitigation policies are firmly ingrained into the fabric of the DoD acquisition community. Recently, the agency has increased its financial support for training and certification provided by technical associations.

DoD employees specializing in corrosion are encouraged to take advantage of training that provides valuable certification credentials. "All of us in the Navy realize that education is critical both for the institution, as well as our young men and women who serve," said Admiral Mike Mullen, 28th Chief of U.S. Naval Operations.

To further support a trained workforce, the DoD Corrosion Office has also underwritten the development of courses designed to train cathodic protection (CP) technicians specializing in the marine industry and infrastructure managers wanting to learn more about corrosion of federal water and wastewater facilities.

For each training course listed below, funding for tuition and registration is available through April 15, 2008, *for all DoD employees*. Each course is listed according to the subject area of expertise. To learn more about course schedules, course content, and individual training providers, please click on a course title and you will be linked to the appropriate Web site and course description.

Course Listings

- [Cathodic Protection](#)
- [Coatings and Coatings Inspection](#)
- [Additional Opportunities](#)

Cathodic Protection

CP-1 Cathodic Protection Tester Course

This is an intensive six-day course that presents CP technology to prepare students for the NACE Cathodic Protection Tester Certification Examination. Course topics include basic electricity, electrochemistry and corrosion concepts, CP theory, CP systems, and CP field measurement techniques. This course provides theoretical knowledge and practical fundamentals for testing on both galvanic and impressed current CP systems. It also involves lectures and intensive hands-on training with equipment and instruments used in CP testing. Hands-on training at outdoor facilities (weather permitting) is also provided. The course concludes with both a two-hour written and a two-hour practical (hands-on) examination.

CP-2 Cathodic Protection Technician-Marine

Developed for NAVSEA, this six-day course provides theoretical knowledge and practical techniques for testing and evaluating data to determine the effectiveness of both galvanic and impressed current CP systems, as it applies to the marine industry. This is an intermediate CP course.

CP-3 Cathodic Protection Technologist

This is an intensive six-day course that presents CP technology to prepare students for the NACE Cathodic Protection Technologist Certification Examination. The CP 3-Cathodic Protection Technologist Course builds on the technology presented in the CP 2-Cathodic Protection Technician Course covering both theoretical concepts and practical application of CP with a strong focus on interpretation of CP data, CP troubleshooting, and mitigation of problems that might arise in both galvanic and impressed current systems. The course is presented in a format of lecture, discussion and hands-on, in-class experiments, and group exercises. There is a written examination at the conclusion of the course.

CP-4 Cathodic Protection Specialist

This is an intensive six-day course that focuses on the principles and procedures for CP design on a variety of structures for both galvanic and impressed current systems. The course discusses the theoretical concepts behind the design and considerations that influence the design (environment, structure type/materials of construction, coatings), design factors, and calculations (including attenuation). The course involves lecture and in-class discussion and practice with design examples on various structures (i.e., pipelines, tanks and well casings, offshore applications, and steel reinforcing in concrete structures). The course concludes with the written NACE CP Specialist examination.

NAVSEA Cathodic Protection Design Specialist (NCPDS) Course

This course is a five-day, NAVSEA-designed and owned program that certifies an individual's capability to understand and apply cathodic protection design principles to Navy ships and submarines in accordance with the technical requirements of the ABS-Naval Vessel Rules and the Navy Technical Manual, Publication T9633-AT-DSP-010, "Ship's Cathodic Protection, Design Calculations, Design Requirements Manual. While the course is intended to certify individuals to the NAVSEA NCPDS level, the class also provides a firm foundation in CP engineering for attendees who may not be seeking full certification at this time.

*Note: Funding for this course is not provided by the DoD Corrosion Office. For more information about tuition reimbursement, please contact Andrew Seelinger at Andrew.Seelinger@navy.mil.

Coatings and Coatings Inspection

C-1 Fundamentals of Protective Coatings for Industrial Structures

This course provides a practical and comprehensive overview for those who are new to the protective coatings industry. It is also an ideal refresher for reviewing the fundamentals of corrosion and the use of coatings as a protective mechanism against corrosion and deterioration of industrial structures.

C-1 eCourse Fundamentals of Protective Coatings for Industrial Structures

This online course provides a practical and comprehensive overview for individuals who are new to the protective coatings industry as well as those needing a review of the fundamentals of corrosion and the use of coatings as a protective mechanism.

C-2 Specifying and Managing Protective Coatings Projects

This course is designed to sharpen your skills in managing the specific requirements of protective coatings projects.

C-2 eCourse Specifying and Managing Protective Coatings Projects

This online management course is designed to sharpen your understanding of overall industry practices, beyond your area of specialization, and put your experience in unison with the most current theories and practices that govern coatings project management.

CIP Level 1

This course is an intensive presentation of the basic technology of coating application and inspection over a full 60 hours of personal instruction and practice. This course provides both the technical and practical fundamentals for coating inspection work on structural steel projects.

CIP Level 2

This course focuses on advanced inspection techniques and specialized application for both steel and non-steel substrates. The course includes in-depth coverage of surface preparation, coating types, inspection criteria, and failure modes for various coatings, including specialized coatings and linings.

CIP Level 3 Peer Review

This course is a detailed oral examination in front of a three-member review board that lasts approximately two hours and is graded on a pass/fail basis. The Peer Review includes a series of questions to test the candidate's practical and theoretical knowledge of coatings and coating inspection. Candidates are questioned from a random draw of topics ranging from standards, procedures, ethics, coatings use, inspection instruments, role-playing, and specific case questions. Successful completion of the CIP Peer Review is required to achieve recognition as a NACE Certified Coating Inspector Level 3 individual.

NBPI - NAVSEA Basic Paint Inspector Course

The NBPI course is similar to NACE Level I or SSPC C-1 but it was developed by the Navy. The course is a four-day quality assessment course that was developed by NAVSEA to train coatings inspectors to inspect critical coated areas as defined by Navy policy documents. These areas include but are not limited to cofferdams, decks for aviation and underway replenishment, chain lockers, underwater hulls, bilges, tanks, voids, well deck overheads, and others. The content of the course is similar in nature to the NACE CIP Level I, but with a particular focus on ship-painting issues. What makes this course valuable is that it also provides both the technical and practical fundamentals for coating inspection work for any steel structure projects other than ships.

Shipboard Corrosion Assessment Training (S-CAT)

In this five-day course developed for naval personnel, students learn how to survey and evaluate protective coating systems as part of a maintenance program for marine vessels.

Additional Opportunities

Corrosion 101-Defense Acquisition University

This online Basic Corrosion course, which is coming soon, is designed for the Department of Defense. It covers basic corrosion theory, federal law pertaining to corrosion mitigation, the structure of the acquisitions community, corrosion prevention design, and several topical live-action scenarios.

Water & Wastewater Facilities

This course is designed for the infrastructure manager who requires an understanding of the world of corrosion control in federal water facilities. Course topics include current facilities equipment and best practices used in both the military community and industry for corrosion prevention and control. This course is currently being developed.

For more information about the organizations that provide training for DoD employees, please consult the following Web sites:

- [NACE International](#)
- [SSPC—The Society for Protective Coatings](#)