



from  
rusted to  
through

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**RUSTED**  
raining

Course Brochure  
for the  
Corrosion Institute of  
Southern Africa



CorrISA, PO Box 5656, Halfway House, 1685  
Tel: +27 (0) 10 224 0761 - Fax to email: 086 726 0318

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133-690 NPO





## CORROSION INSTITUTE of SOUTHERN AFRICA

### EDUCATION AND TRAINING COURSES

#### **Corrosion costs South Africa in excess of 3% of GDP annually**

The Corrosion Institute of Southern Africa (CorriSA) has served the needs of individuals, academia and industry since the early 1960s in the fight against corrosion. It is a non-profit organisation seeking to pull together all interested and affected parties in the battle to reduce and prevent corrosion.

The Institute serves those responsible for combating corrosion: scientists, engineers, anti-corrosion contractors.

The interests of the Institute embraces the evaluation of a vast range of materials, including both metallic and non-metallic construction materials and corrosion protection methods.

The impact of environmental conditions on the durability of materials is also considered.

The Institute also continually stresses that the costs of corrosion can be minimised by good design and appropriate application of existing technology.

Since the beginning, CorriSA has been recognised by the industry as a training service provider for its own internal courses, as well as its relationship with SAQCC (Corrosion Protection) and NACE International.

Registration with the South African Department of Education and the Council for Higher Education is in progress.



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## NETWORK



Manufacturing, Engineering and Related Services SETA  
CorrISA received Accreditation



Department of Social Development  
Registration number 113-690 NPO



Department of Trade and Industry  
CorrISA is an Industry Association



National Science and Technology Forum  
CorrISA is a member of NSFT and ProSET



National Association of Corrosion Engineers  
CorrISA is licensed to run the NACE suite of Courses



South African Qualification & Certification Committee for Corrosion Protection  
An industry recognised qualification council. CorrISA acts as their secretariat.



South African Bureau of Standards  
CorrISA represents itself in this forum



South African Council for Natural Scientific Professions  
CorrISA is a Voluntary Association



ECSA – Engineering Council of South Africa  
CorrISA is a Voluntary Association

### Network includes:

- \*AFSA – Aluminium Federation of South Africa
- \*CDA – Copper Development Association
- \*CSSA – Concrete Society of Southern Africa
- \*HDGASA – Hot Dip Galvanising Association of South Africa
- \*IMESA – The Institute of Municipal Engineering of Southern Africa
- OCCA – Oil and Colour Chemists Association
- SAIMM – South African Institute of Mining and Metallurgy
- \*SAINT – South African Institute of Non-Destructive Testing
- \*SAISC – South African Institute of Steel Construction
- SAIT – South African Institute of Tribology
- \*SAIW – South African Institute of Welding
- \*SAPMA – South African Paint Manufacturers Association
- \*SASSDA – South African Stainless Steel Development Association

\*CorrISA – Reciprocal Members



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## CorriSA Education Framework

Key area	Course Code	Focus	Target
Corrosion in general	NJR	Corrosion introduction	"Not Just Rust" is our introduction into the corrosion industry course
	EcoCor	Corrosion Costing	"Economics of Corrosion" helps us understand the cost implications of corrosion for project planning and maintenance
	CorEng	Corrosion in detail	"Corrosion Engineering" is an in-depth introduction to the fundamental principles of corrosion engineering
	<i>ECDA</i>	Corrosion detection procedures	<i>"External Corrosion Direct Assessment" trains the procedures required for corrosion detection on buried structures</i>
Corrosion Defence	CITWI	Design	"Best Practice Awareness of Corrosion in Water Utilities"
	NACE CIP1	Protective Coating	NACE Coating Inspection Programme
	NACE CIP2		
	NACE CIP3		
	NUCLEAR POWER PLANT		
	O-CAT		
	NACE PCS1	General Coatings	NACE Protective Coating Specialist programme from basic principles to management
	NACE PCS2		
	NACE PCS3		
	NACE CP1	Electrically induced protection	NACE Cathodic Protection Practical programme
NACE CP2			
P-CAFT	Pipeline Industry Program	NACE Cathodic Protection	
PCIM			
Further education	Technical Evening Discussions	Corrosion as a whole	<i>Monthly meetings planned by our branches</i>
	Conferences	Corrosion as a whole	<i>AfriCORR and endorsed congresses</i>
	the CORē	Corrosion as a whole	<i>A centre intended to host corrosion related meetings, a library, a museum and be a hub for members</i>

### Key

Brown text – Certificated by CorriSA

*Italics – Endorsed by CorriSA*

Blue Text – Certificated by NACE Int. and trained through CorriSA

### Courses

CorriSA recognises there are many quality corrosion-training programmes in the market and would be interested in endorsing many forms of corrosion education. Talk to us about adding additional courses to our suite. The above courses are run throughout the country and are dependent on numbers. Most courses are run in our own facility we call **the CORē** located at **38 Allan Road, Glen Austin, Midrand, Johannesburg.**



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## **COURSE: NOT JUST RUST**

### **Description:**

This course is intended to provide the bigger picture as to why and how corrosion affects us and touches on the ways we can prevent those effects. In the end, the delegate would have an idea as to where they fit in the field of corrosion and how they can grow further.

The course is designed to stimulate conversation in a comfortable environment. Delegates will see corrosion take place and discuss defensive mechanism with a multitude of interactive activities.

### **Aimed at**

- All new comers into the corrosion field
- Those looking to enter the corrosion field
- Those in the corrosion sector looking for direction
- Staff working in the corrosion field who have yet to grasp the enormity of the corrosion challenge

### **Subjects covered**

- What is corrosion and why should we care?
- Where does corrosion happen?
- Defences against corrosion
  - Material selection
  - Structural design
  - Environment management
  - Protective coatings
  - Electrically induced protection

### **Minimum entry requirements**

- English Literacy

### **Cost**

- Paid up company members get to send 1 person free of charge, each year
- Thereafter costs apply as they would for independent delegates (please refer to the course fees)

### **Supplied**

- Light snacks and refreshments

### **Duration**

- ½ day

### **Outcomes**

- General awareness of corrosion



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## **COURSE: CORROSION MANAGEMENT (ECONOMICS OF CORROSION)**

### **Description**

Corrosion mechanisms and corrosion methodologies are extremely complex and are based on rigorous theoretical considerations. It is therefore important to understand the process of costing for corrosion for each specific environment and project.

### **Aimed at**

- Plant managers and operators
- Project planners
- Engineers
- Financial executives
- Asset owners
- Estimators
- Consultants
- Anyone interested in corrosion costing challenges

### **Subjects covered**

- Basic corrosion mechanisms
- Corrosion environment systems and asset management
- Corrosion risk management
- Calculating and evaluating corrosion costs
- Managing corrosion economically

### **Minimum entry requirements**

- English Literacy
- General awareness of corrosion

### **Cost**

- Please refer to the course fees

### **Supplied**

- Workbook
- Lunch, light snacks and refreshments

### **Duration**

- 2 days (including exam)

### **Outcomes**

- Empowering of decision makers by providing them with sufficient knowledge and skills to more competently recognize the criticality of addressing all corrosion issues in the most cost effective fashion.



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## **COURSE: CORROSION ENGINEERING**

### **Description**

The Corrosion Institute of Southern Africa specifically developed this course for industry to give engineering personnel and affiliates a good grounding in corrosion science and technology, and to prepare them for more focused corrosion prevention training in the future. The course is based around the book, "Corrosion Control in Southern Africa" published by CorriSA. By the end of this examined course, students will have an in-depth overall understanding of corrosion and would be able to use the subject matter in industry applications and beyond.

### **Aimed at**

- Plant managers and operators
- Project planners
- Engineers
- Financial executives
- Asset owners
- Estimators
- Corrosion contractors and consultants
- Anyone wanting a deeper understanding of corrosion

### **Subjects covered**

- Corrosion "How it Works"
- Forms of Corrosion
- Corrosion Environments
- Material Selection and Design
- Modifying the Environment
- Organic Coatings
- Metallic and Inorganic Coatings
- Cathodic and Anodic Protection

### **Minimum entry requirements**

- English literacy
- Matric or higher qualification
- Basic knowledge of corrosion
- Basic knowledge of both chemistry and maths

### **Cost**

- Please refer to course fees

### **Supplied**

- "Corrosion Control in Southern Africa" textbook published by CorriSA
- Lunch, light snacks and refreshments

### **Duration**

- 5 days (Monday-Friday including exam)



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## **COURSE:    EXTERNAL CORROSION DIRECT ASSESSMENT**

### **Description**

External Corrosion Direct Assessment (ECDA) is a structured process used to evaluate buried onshore ferrous pipeline integrity. The ECDA goal is to enhance safety by managing the risk of pipeline corrosion failures while minimizing the cost required for excavations and repairs. External Corrosion Direct Assessment Course is designed to assist delegates on the ECDA procedures in order to manage corrosion challenges for buried structures.

### **Aimed at**

- Plant managers and operators
- Project planners
- Engineers
- Pipeline operators
- Asset owners
- Corrosion contractors and consultants
- Anyone wanting a deeper understanding of managing buried structures.

### **Minimum entry requirements**

- English literacy
- Matric or higher qualification
- Basic knowledge of corrosion
- Basic knowledge of working with buried structures

### **Cost**

- Please refer to course fees

### **Supplied**

- Workbook
- Lunch, light snacks and refreshments

### **Duration**

- 2 days



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## COURSE: CORROSION IN THE WATER INDUSTRY

### Description

The Corrosion in the Water Industry Forum” (CITWIF) comprising of local authorities who issued the following statement:

*The Water Service Providers (WSP) and Water Service Authorities (WSA) make significant financial investments in pipelines and associated water infrastructure. It follows that asset owners in the water industry are desirous of the longest possible life expectancy, which in turn usually relates to the longest possible time period being required before first maintenance and a strong preference for the highest possible level of corrosion protection of the assets. It is a fact that corrosion is often the single biggest contributor to the deterioration of the asset value. The skill and workmanship utilised in corrosion mitigation has a significant bearing on the ultimate corrosion protection and life expectancy of the assets. Education and training has been identified as a South African national priority, and upgrading of Corrosion Protection Skills is essential for service delivery within the broad Water Industry.*

The Corrosion Institute is offering a three-day certificated course titled “Best practice Awareness of Corrosion in Water Utilities” which aims to address these issues and provide a suitable background for those who have not been exposed to materials and corrosion.

### Aimed at

- Plant managers and operators
- Project planners
- Engineers and new engineering graduates who have experience in pipeline technology
- Pipeline operators
- Asset owners Corrosion contractors and consultants
- Anyone wanting a deeper look at managing buried structures.

### Recommended entry requirements

- English literacy
- Matric or higher qualification
- Basic knowledge of corrosion
- Basic Understanding of science and experience with buried pipelines

### Cost

- Please refer to course fees

### Duration

- 4 days (including exam)

### Subjects covered

- Principles of Electricity
- Principles of Chemistry
- Principles of Electrochemistry
- Summary of Corrosion Mechanisms
- Selected Types of Corrosion
- Coating & Lining Technology
- Types of corrosion Coatings
- Cathodic Protection Fundamentals
- Stray Current Interference
- Pipe Laying and Handling
- Field Joints
- Coating & Lining Inspection
- Field measurements
- Coating and CP Integrity Surveys
- Typical Fault finding on CP components
- Occupational Health & Safety
- Relevant industry standards and committees

### Supplied

- Workbook
- Lunch, light snacks and refreshments



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## **COURSE: NACE Coating Inspector Program (CIP)**

NACE International training courses and certificates are the most recognised and widely accepted corrosion training courses in the world. The training prepares a student for the comprehensive career in corrosion protection.

### **NACE COATING INSPECTOR PROGRAM Level 1 (CIP1)**

#### **Description**

This course offers instruction on the technical and practical fundamentals for coatings inspection work on structural steel projects. The course provides students with knowledge of coating materials and techniques for surface preparation and application that prepares the student to perform basic coating inspections using non-destructive techniques and inspection instrumentation.

#### **Aimed at**

- Although specifically designed for coating inspector trainees, this course benefits anyone interested in gaining a better understanding of coatings application and inspection including project engineers, quality assurance managers, contractors, technical sales representatives, blasters, paint applicators and maintenance personnel.

#### **Recommended entry requirements**

- English literacy
- Matric or higher qualification
- 1 year industry experience

#### **Learning objectives – the goal is to prepare students to:**

- Recognise coating types and curing mechanisms
- Understand coating specifications including service environments and coating life cycle
- Understand surface preparation equipment, methods and standards for abrasive blasting, solvent cleaning and power and manual tool cleaning
- Apply coating by brush, roller, mitt and conventional and airless spray
- Perform inspection procedures and the role of the inspector including safety, ethics and conflict prevention and decision making
- Test for environmental or ambient conditions and non-visible contaminants
- Utilize non-destructive test instruments such as wet-film and dry-film thickness gauges and low and high voltage holiday detectors
- Measure surface profile using replica tape and anvil micro meters, surface profile comparators and digital surface profile gauges
- Identify quality control issues, recognising design and fabrication defects and coating failure modes
- Use Material Safety Data Sheets (MSDS) and product technical data sheets
- Log and document data

#### **Supplied**

- Course manual and workbook
- Lunch, light snacks and refreshments

#### **Duration**

- 5 day course (the practical exam takes place on the Friday afternoon)



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## COATING INSPECTOR PROGRAM Level 2 (CIP2)

### Description

This course focuses on advanced inspection techniques and specialised application methods for both steel and non-steel substrates, including concrete using both non-destructive and destructive techniques. Surface preparation, coating types, inspection criteria, lab testing and failure modes for various coatings, including specialised coatings and linings are also covered.

### Aimed at

- Anyone interested in becoming NACE Coating Inspector Level 2 certified or increasing his/her coating inspection knowledge

### Recommended entry requirements

- Successful completion of CIP Level 1 certification

### Learning objectives – the goal is to prepare students to:

- Understand the advanced corrosion theory
- Understand environmental controls and advanced environmental testing
- Identify centrifugal blast cleaning and water jetting equipment, standards, methods of use and inspection concerns
- Recognise the importance of surface preparation, application and inspection of liquid-applied and thick barrier linings
- Use specialised application equipment including plural-component, electrostatic and centrifugal and hot spray systems
- Understand concrete coatings
- Identify specialised coating techniques and application of non-liquid coatings
- Distinguish coating survey techniques and procedures and common coating failure modes

### Supplied

- Course manual and workbook
- Lunch, light snacks and refreshments

### Duration

- 5 day course (the practical exam takes place on the Friday afternoon)



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## NACE COATING INSPECTOR PROGRAM Level 3 – PEER REVIEW (CIP3)

### Description

Peer review examinations are conducted by contemporaries of the coating inspection industry and are experts in their field of work. There is no corresponding course work, only an oral assessment.

Successful completion of the CIP Peer Review is required to achieve recognition as a Certified NACE Coating Inspector. This 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 inspections. Candidates are questioned from a random draw of topics and specific case studies. Students who have successfully completed CIP Level 2 and have 5 years of verifiable work experience in coatings may register for Peer Review.

### Aimed at

- Anyone interested in completing his or her CIP training to receive recognition as a NACE Certified Coating Inspector Level 3

### Duration

- Allow for ½ day for the Peer review interview times will be given



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## **COURSE: NACE PROTECTIVE COATING SPECIALIST PROGRAM PCS**

### **Description**

This program focuses on the structure of protective coatings. What are they, why and where they work, and challenges with application.

### **PROTECTIVE COATING SPECIALIST 1 (BASIC PRINCIPLES)**

#### **Description**

This course introduces both the theoretical and practical aspects of using coatings to control corrosion, as well as the economic benefits of managing them. It defines and examines common corrosion control coatings and addresses when, how and where these should be used.

#### **Aimed at**

- Planning, engineering and supervisory level personnel responsible for industrial coatings and linings who are new to the field or position
- Specifiers, maintenance and project engineers in all industries
- Marketing Representatives of coatings materials and equipment
- Unit managers involved in corrosion

#### **Recommended entry requirements**

- English literacy

#### **Learning objectives – the goal is to prepare students to:**

- Control corrosion and the purpose of coatings and linings
- Identify the types of coating system and select the appropriate one based on factoring considerations
- Recognise the purpose of surface preparation and identify errors/omissions
- Understand the types of methods of application and associated standards
- Ensure desired results by understanding the importance of coating specification and pre-job conference
- Conduct inspection and quality control and understand the instruments and tools required
- Utilise instruments and tests to conduct inspection and quality control
- Accurately provide documentation and report data, recognise the importance of it and how it assists with maintenance planning

#### **Supplied**

- Course manual
- Lunch, light snacks and refreshments

#### **Duration**

- 3 day course, concludes with a written exam.



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## PROTECTIVE COATING SPECIALIST 2 ADVANCED (PCS 2 advanced)

### Description

This course provides advanced-level technology topics related to protective coatings. Highlights include an in-depth discussion of coatings, their basic chemical properties, and any unique considerations for surface preparation, application and inspection. The course also delves deeply into testing coating properties and performance, common coating defects, substrates, selecting coating systems, the specification and surveys and maintenance planning are also covered.

### Aimed at

- This course is suitable for planning, engineering, supervisory level or technical personnel who work with protective coatings on a regular basis. The students should be able to learn basic chemistry concepts as they pertain to coatings and corrosion.

### Recommended entry requirements

- Successful completion of PCS 1 basic principles certification

### Learning objectives – the goal is to prepare students to:

- Understand the advanced corrosion theory
- Understand environmental controls and advanced environmental testing
- Identify centrifugal blast cleaning and water jetting equipment, standards, methods of use and inspection concerns
- Recognise the importance of surface preparation, application and inspection of liquid-applied and thick barrier linings
- Use specialised application equipment including plural-component, electrostatic and centrifugal and hot spray systems
- Understand concrete coatings
- Identify specialised coating techniques and application of non-liquid coatings
- Distinguish coating survey techniques and procedures and common coating failure modes

### Supplied

- Course manual
- TPC-9 Users guide to Hot Dip Galvanizing for Corrosion Protection in Atmospheric Service
- Lunch, light snacks and refreshments

### Duration

- 3 day course, concludes with a written exam



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## **COURSE: NACE Offshore Corrosion Assessment Training (O-CAT)**

### **Description**

The Offshore Corrosion Assessment Training course is a five-day program addressing the elements of in-service inspection and maintenance planning for fixed offshore structures.

### **Aimed at**

- Anyone involved in corrosion control and integrity management of fixed offshore structures.
- Varied levels of personnel, from those with management and planning responsibilities to the field inspectors conducting in-service inspections of the facility.

The program is also valuable for offshore platform operations personnel to better understand corrosion prevention systems utilized on offshore structures and their successful implementation

### **Recommended entry requirements**

- English Literacy
- Matric or higher qualification
- Basic understanding of science and chemistry

### **Learning objectives – the goal is to prepare students to:**

- Define corrosion and recognise the importance of corrosion control
- Consistently assess the condition of the corrosion protective systems in the offshore environment
- Recognise the various types of oil platforms/rigs and equipment
- Ensure the offshore structure is protected from corrosion and in accordance with regulations
- Provide safe and dependable structures and facilities through usage of corrosion prevention maintenance programs
- Identify and define the primary corrosion protection systems used in offshore
  - Protective coatings
  - Splash zone systems
  - Cathodic Protection
- Recognise the various condition grading system
- Break down a wellhead platform into a manageable system for condition assessment and data collection
- Perform a visual assessment and physical inspection of the corrosion prevention systems of a four-pile wellhead platform
- Be in accordance with assessment standards
- Deliver and maintain safety
- Understand the Bureau of Safety and Environmental Enforcement A-B-C facility evaluation grading system requirements for Level 1 inspection reporting

### **Supplied**

- Course manual
- Lunch, light snacks and refreshments

### **Duration**

- 5 day course. A written and practical exam is given at the end of the course



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## **COURSE: NACE Nuclear Power Plant training for coating inspectors (NPP)**

### **Description**

This course is designed specifically to train CIP certified coating inspectors to conduct inspections in nuclear power plants, as well as to familiarise non-CIP certified personnel with NPP coating requirements. The training focuses on the unique challenges presented by a nuclear facility's restrictive and safety-critical environment, as well as the verbatim compliance demanded in NPP's. The course also delves deeply into government, industry and plant-specific regulations, technical specifications and procedures. A written examination is given at the end of the course.

### **Aimed at**

- NPP quality assurance managers
- Qualified coating inspectors
- Inspection companies – qualified inspectors and managers
- Coating manufacturers sales and technical representatives
- Coating inspection and evaluation personnel at architectural companies
- Coating contractors
- Paint supervisors at nuclear power plants

### **Recommended entry requirements**

- English Literacy
- CIP Level 1 is strongly recommended

### **Learning objectives – the goal is to prepare students to:**

- Understand NPP operations, work procedures and industry terms
- Recognize all industry regulatory organisations worldwide
- Perform inspections in various areas of a NPP
- Recognise the purpose, criteria and types of qualified NPP coatings
- Develop and manage a safety-related coatings program
- Ensure surface preparation and coating application of different coating service level areas match coating system and DBA qualification requirements
- Determine and apply required qualifications to meet industry and plant-specific ANSI and ASTM standards.

### **Supplied**

- Course manual and workbook
- Lunch, light snacks and refreshments

### **Duration**

- 5 Days

A certificate of completion is administered after successful completion of this course to students who are not CIP certified. Those who are certified must submit the required NFCS work experience forms to receive the endorsement on their CIP Certification.



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## **COURSE: NACE CATHODIC PROTECTION PROGRAM**

### **Description**

The NACE CP training certificate program is a comprehensive programme designed for individuals involved in corrosion industry who are exposed to safety, cost and maintenance implications of corrosion associated with metals submerged in soil, water, acids and other aggressive environments.

### **Aimed at**

- Project engineers
- Field technicians corrosion industry suppliers
- Quality assurance managers
- Contractors
- Technical sales representatives
- Maintenance personnel

## **CATHODIC PROTECTION 1 – TESTER (CP1)**

### **Description**

Course topics include basic electricity and electrochemistry, basic corrosion concepts, CP concepts, 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.

### **Aimed at**

- This program benefits anyone responsible for supervising CP systems, measuring the effectiveness of CP systems and/or recording this data, including CP field personnel and technicians.

### **Recommended entry requirements**

- English Literacy
- High school diploma
- Six months of CP work experience
- Ability to perform basic math calculations (simple algebra, fractions and conversions)

### **Learning objectives – the goal is to prepare students to:**

- Understand the basics of electricity, electrical laws, electrochemistry, corrosion and CP theory
- Understand how polarity is related to current flow and metal corrosion activity
- Conduct tests to identify shorts and continuity tests in CP systems
- Use test instruments to perform a variety of field tests such as structure to soil potentials, voltage and current measurements, soil resistivity, pipe/cable locating and rectifier readings
- Understand CP components including impressed current systems, galvanic anodes and test stations
- Read shunts and understand their use in rectifiers, bonds and anodes
- Perform periodic surveys to confirm the effectiveness of a CP system
- Gain knowledge of reference cells, their maintenance, use and precautions
- Learn basic location mapping, report preparation and record keeping
- Review safety issues specific to CP
- Understand code requirements related to CP

### **Supplied**

- Course manual and workbook
- Lunch, light snacks and refreshments

### **Duration**

- 5 Days



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133-690 NPO





## CATHODIC PROTECTION 2 – TECHNICIAN (CP2)

### Description

Course topics include intermediate level discussions of corrosion theory and CP concepts, types of CP systems, CP interference, introduction to CP design and advanced field measurement techniques. This course provides both theoretical knowledge and practical techniques for testing and evaluating data for both galvanic and impressed-current CP systems. The course is designed for persons who either have an engineering/scientific background and some working knowledge of CP, or have several years of CP field experience with a sound technical background. High school science and mathematics, comprehensive knowledge of electricity, electrical laws and circuits, meter operation and CP fundamentals are necessary for the understanding of the material in this course.

### Aimed at

- This program benefits anyone responsible for supervising CP systems, measuring the effectiveness of CP systems, and/or recording this data, including CP field personnel and technicians

### Recommended entry requirements

- English Literacy
- In-depth high school chemistry and mathematics
- The NACE Basic Corrosion course
- CP 1 Tester or equivalent

### Learning objectives – the goal is to prepare students to:

- Perform advanced field tests (including current requirement test, shorted casing test, IR drop test, soil resistivity and interference tests) and evaluate the results
- Perform tests to verify the presence of stray current interference and recommend method(s) to mitigate the interference
- Conduct and understand the importance of periodic survey, including IR-free readings, polarization decay tests and current measurements
- Maintain documentation and records, including data plotting and analysis
- Understand AC voltage and its mitigation
- Test and troubleshoot rectifier component parts
- Understand corrosion coupon test stations
- Understand code requirements related to CP

### Supplied

- Course manual and workbook
- Lunch, light snacks and refreshments

### Duration

- 5 Days

CP 3 (Cathodic Protection Technologist) CP4 (Cathodic Protection Specialist) and CP Interference can be scheduled, dependant on demand



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## **COURSE : NACE PIPELINE INDUSTRY PROGRAM**

### **PIPELINE CORROSION ASSESSMENT FIELD TECHNIQUES (P-CAFT)**

#### **Description**

This course covers corrosion basic principles and theory, field techniques, direct assessment, in-line inspection and hydro testing techniques, indirect inspection, direct examination, safety and data documentation.

#### **Aimed at**

- Designed for maintenance, service, technical or field personnel responsible for the implementation and reporting of pipeline inspection activities

#### **Recommended entry requirements**

- English Literacy
- It is strongly recommended that students take the CP1 Tester course as well as the Coatings in Conjunction with Cathodic Protection course or a CIP Level 2 course prior to registering for the P-CAFT course.
- Students should also review the corrosion cell before attending.

#### **Learning objectives – the goal is to prepare students to:**

- Accurately collect data used for the evaluation and monitoring of a pipeline corrosion integrity plan
- Recognise pipeline anomalies
- Make recommendations for resolving technical issues “in the ditch”
- Evaluate a pipeline in-servicing using ECDA and ICDA methods and techniques
- Recognise problems “in the ditch” and be able to collect the data necessary for further engineering evaluation

#### **Supplied**

- Course manual and workbook
- Lunch, light snacks and refreshments

#### **Duration**

- 5 Days, concludes with a written examination. No hands-on training is provided in this course



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## PIPELINE CORROSION INTEGRITY MANAGEMENT (PCIM)

### Description

This course serves as the key training track for the PCIM professional who is expected to focus on the implementation and management of integrity program for a pipeline system. The course provides a comprehensive up-to-date coverage of the various aspects of time-dependant deterioration threats to liquid and gas pipeline systems and will focus on interpreting integrity related data, performing an overall integrity assessment on a pipeline system, calculating and quantifying risk, and making recommendations to company management on risk management issues.

### Aimed at

- Individuals responsible for implementation and/or management of an integrity program for a pipeline system with an emphasis on integrity verification and maintenance optimization.

### Recommended entry requirements

- English Literacy
- 8 Years work experience, or 4 years work experience and 4-year degree in Physical Science or Engineering is recommended
- Students should be familiar with the following standards : The Code of Federal Regulations, ASME B31.8S API 1160

### Learning objectives – the goal is to prepare students to:

- Interpret integrity related data
- Select and perform an overall integrity assessment on a pipeline system
- Understand remediation activity and repair methods
- Perform threat identification and assessment
- Understand CFR49 and integrity requirements
- Perform post integrity assessment risk analysis
- Calculate and quantify risk
- Make recommendations to company management on risk management issues
- Perform integrity management planning

### Supplied

- Course manual and workbook
- Lunch, light snacks and refreshments

### Duration

- 5 Days, concludes with a written examination.



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## MAINTAINING RELEVANCE

CorrISA is proactively striving to remain relevant. If you feel there are new courses we could offer and/or endorse, please let us know. Should you wish to lecture for us or become an assessor, then please contact us and we can begin the evaluation process.

## CONDITIONS FOR THE DELEGATES

### General Conditions for Corrosion Institute of Southern Africa (CorrISA) Courses:

- All courses are presented in English
- Each delegate is responsible for their own wellbeing and cannot hold CorrISA responsible for any losses or injury.
- All courses are **STRICTLY PREPAID**. Bookings will only be secured once full payment or an official company order number has been received. Course material will only be made available upon receipt of full payment. Proof of payment must be emailed or faxed to the Course administrator. **PROOF OF PAYMENT MUST REFLECT THE PRO FORMA NUMBER OR DELEGATES FULL NAME**. The number of seats of each course is LIMITED and acceptance will be on a first come first pay basis. Confirmation of attendance will be sent to the delegate on receipt of full payment. CorrISA reserves the right to refuse admission.

### Amendments:

- Unforeseen circumstances may necessitate the appointment of instructors other than those advertised. Course dates, times and venues are subject to change. If a course is cancelled by CorrISA, the delegates are eligible for a full refund or may be transferred into the next available course.

### Cancellations:

- Please see the website



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## CorrISA

CorrISA is a volunteer driven organisation and requires as much input from the industry as possible. If you feel you could assist with any of the following, please contact us at [director@corrisa.org.za](mailto:director@corrisa.org.za).

## MEMBERSHIP

Corrosion impacts everyone and therefore CorrISA invites everyone to be members, however we have a wide range of memberships available to suit your needs. Contact us for more information at [members@corrisa.org.za](mailto:members@corrisa.org.za).

## TECHNICAL EVENINGS

In each of our regions, we try to run informal technical evenings once a month. Speakers will inform our members on developments within the corrosion industry. For more information, contact us at [events@corrisa.org.za](mailto:events@corrisa.org.za).

## the CORē

Our new facility in Midrand was purchased to meet the needs of our training program as well as to provide a centre for Corrosion. This venue consists of 3 dedicated lecture rooms and multiple other rooms for various potential activities as well as situated on large grounds with ample secure parking. At this venue, we are developing a library, a museum and a home for members to network, teach and learn on all things corrosion related. If you would like to use the facilities for your own meetings or training, please contact us at [events@corrisa.org.za](mailto:events@corrisa.org.za).

## SOCIAL ACTIVITIES

In an effort to keep our members active, we run annual events to promote networking within the industry. These events include charity golf days, fishing days, and awards dinners.

## SOCIAL IMPACT

CorrISA is very interested in reinvesting back into the society and runs charity events to donate to chosen registered groups. We are also very interested in promoting education and do award scholarships to select university students.

## OPPORTUNITIES

CorrISA can advertise any available posts that may be available when requested by our company members. We are always on the lookout for potential lecturers and occasionally staff as and when needs arise. [director@corrisa.org.za](mailto:director@corrisa.org.za)

## COMMUNICATION

- **Website**  
[www.corrosioninstitute.org.za](http://www.corrosioninstitute.org.za) is meant to be our centre information distribution. We endeavour to keep the website as up to date as possible.
- **Newsletter**  
We email our membership regularly to keep them informed of any relevant news. If you are not receiving any mails, please contact us at [members@corrisa.org.za](mailto:members@corrisa.org.za).
- **Magazine**  
Please contact Terry Smith at [editor@corrisa.org.za](mailto:editor@corrisa.org.za) for our magazine **CORROSION EXCLUSIVELY** enquiries.



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Please visit us @ the CORē and see how you can get involved

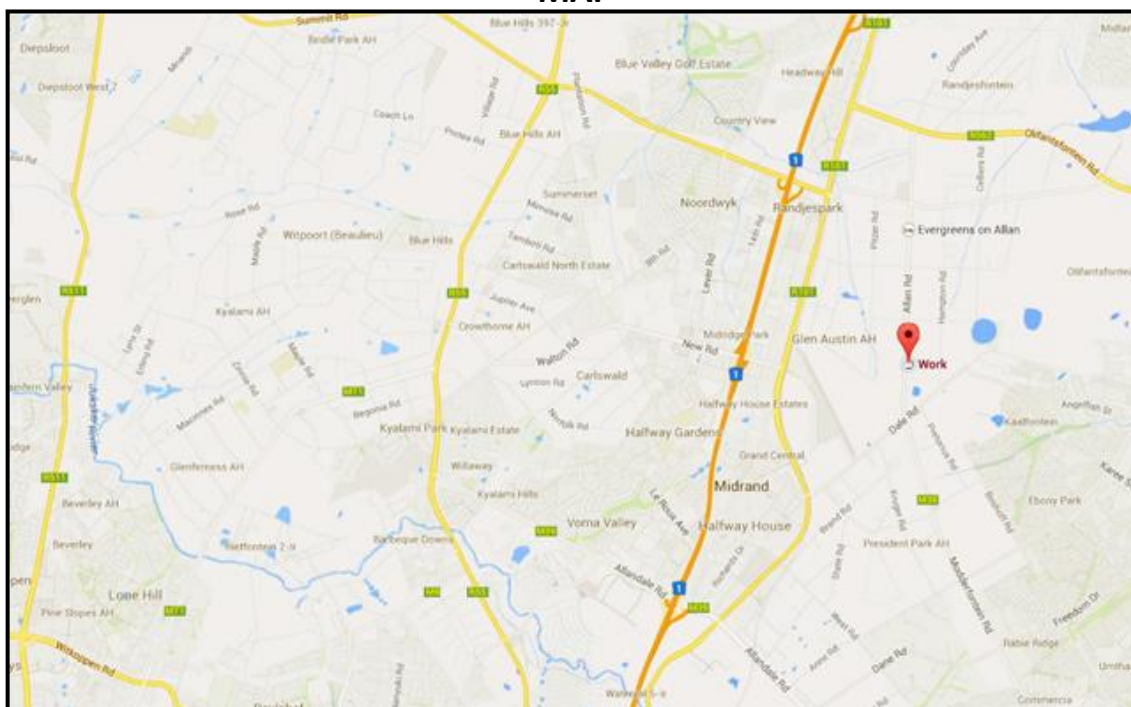
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South Africa

**Telephone** +27 (0) 10 224 0761

**Office hours** Monday to Thursday 07:30 to 16:30  
Friday 07:30 to 14:30

**GPS Coordinates** Latitude South 25deg. 58 minutes 52.2114 seconds  
Longitude East 28deg. 9 minutes 12.888 seconds

### MAP



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