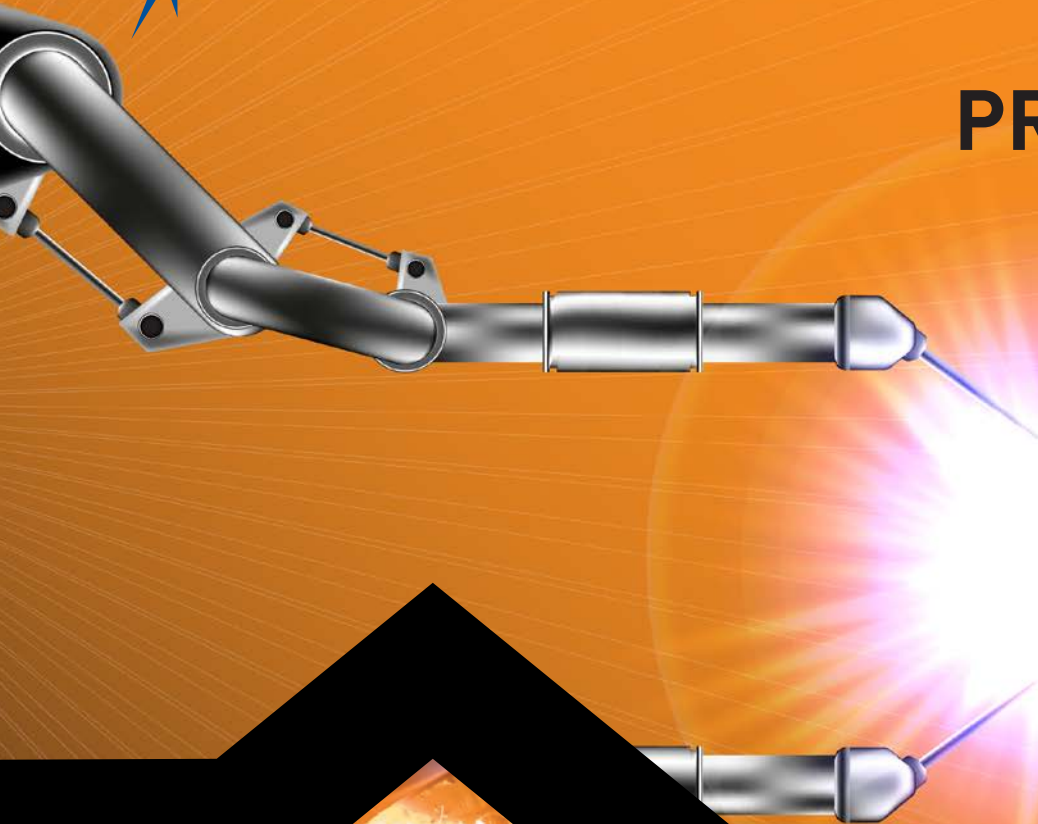




Southern African Institute of Welding

COURSE PROSPECTUS 2022



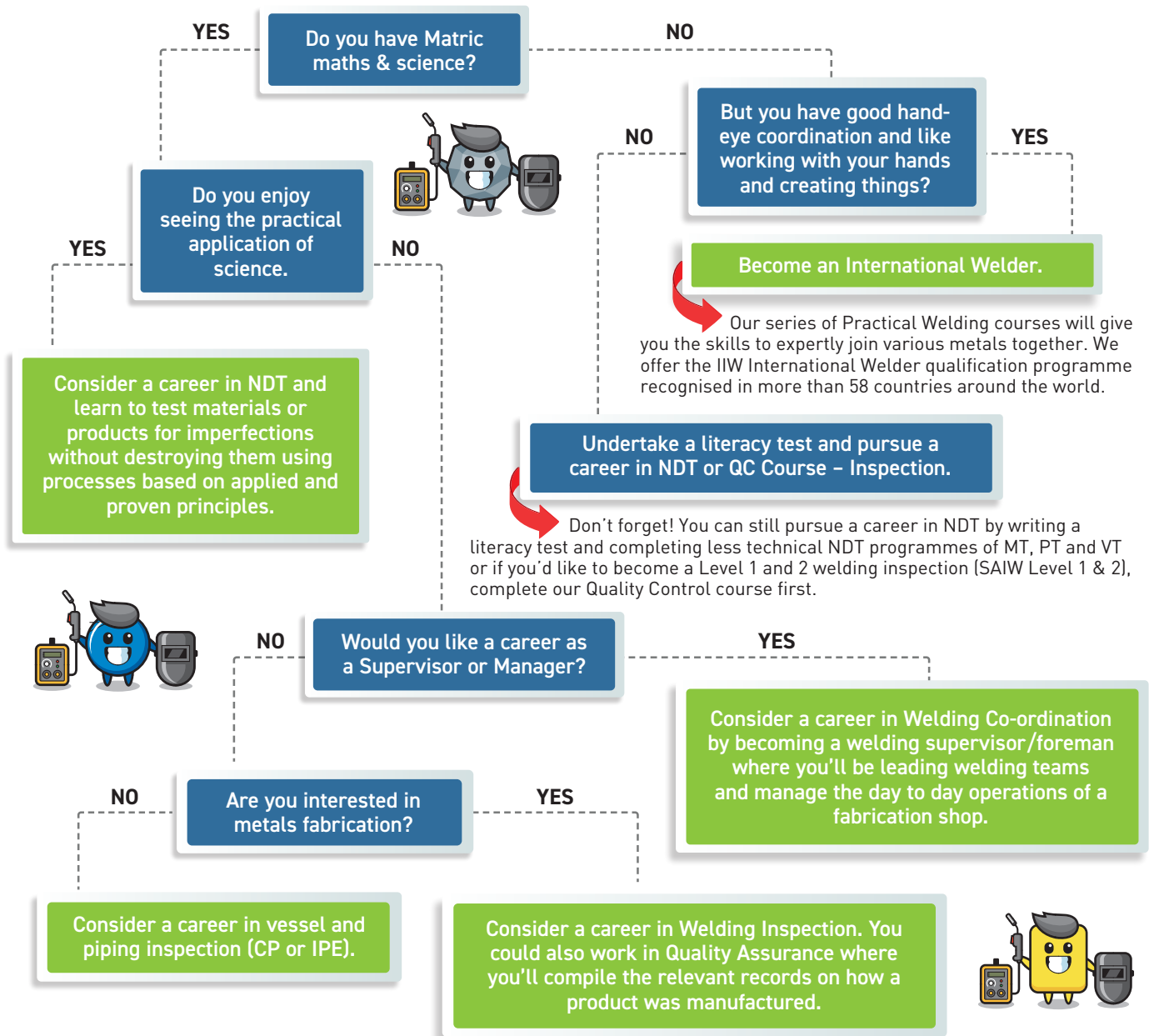
Promoting World Class Excellence in Welding,
Non-Destructive Testing and Allied Technology



A welder wearing a yellow helmet, orange shirt, blue jeans, and red gloves is welding a metal structure. A bright light is visible at the point of contact. In the foreground, a blue welding torch is visible. The background shows a large, rusted metal wall.

CAREERS IN WELDING

How can SAIW power your career?



**Choose a career
in welding!**

Using the SAIW to deliver your preferred programme will ensure you a bright and prosperous career, so register today!

For more information contact our Client Liaison on 084 446 0629 or 011 298 2100.

A Career in Welding

In recent decades welding has become a dominant process in the fabrication of industrial products and in the building of structures from steel. It is used in all phases of production and is needed not only nationally but also internationally in almost every industry ranging from micro-electronics to construction of petrochemical plants, power generation, buildings and transport. Due to the diversity of welding-related projects, there is excellent flexibility to switch industries without the need to change your career.

The fact that welding is in a strong growth trend accounts for the mounting interest in it as a career. Completing a course in welding can virtually assure you of a gainful employment opportunity for advancement during your career. Similarly, those who become welding inspectors, welding coordinators, non-destructive testing (NDT) technicians, professional welding engineers or designers can look forward to extremely rewarding career opportunities.

SAIW has been offering training courses in both welding and non-destructive testing technologies since the late 1970s. You can choose to be a **practical welder** where you will join materials together using any of the various welding processes. As a welder you can progress your career by further study in **welding coordination** to become a welding supervisor/foreman. The welding coordination courses are not only for welders. People hoping for a career in leading welding teams and managing the day-to-day operations of a fabrication shop can enrol on these courses too, for example; welding engineer, welding technologist, welding specialist etc.

SAIW courses also present opportunities for you to work as a **welding inspector**, a career in which you will be responsible for verifying that the welders are following their work instructions, and the welding supervisors are doing their work according to approved and implemented procedures. As a welding inspector you can also work in quality assurance

where you compile the relevant information for records on how a product was manufactured.

The SAIW also offers **Non-Destructive Testing** courses in six different testing methods. Personnel form part of the chain of various fields of expertise which are used to ensure the world is using high quality products which pose little risk to the end user. Personnel test materials or products for any imperfections without destroying the products or materials and is not only limited to testing of welds, but can be extended to various product sectors such as castings, forgings, tubes etc. and applied in most of the industrial sectors such as pre- and in-service testing, power generation, petrochemical etc. This is achieved by using various applied scientific principles and therefore a career in NDT will never stagnate. There will always be the opportunity to diversify into other methods or alternatively you can specialise in one or more methods to an advanced level of competency.

SAIW courses are intended to meet best practice **international standards** and many are accredited by the International Institute of Welding (IIW) or International Committee for Non-Destructive Testing (ICNDT) Mutual Recognition Agreement (MRA).

SAIW inspection courses also fulfil the requirements of local certification programmes for inspection personnel (SAQCC IPE and CP) which are approved by the Department of Employment and Labour.

SAIW practical welding courses are accredited by IIW for the International Welder (IW) programme and welder apprenticeships by QCTO.

The SAIW offers training courses at our Johannesburg headquarters, and in Durban and Cape Town. Many SAIW courses are suitable for presentation at in-company training facilities.

SAIW Course World

Below infographic represents the entire offering of SAIW courses.

SAIW COURSES

- QCTO Welder
- Welding Symbols
- Welding
- International Plate Welder
- International Fillet Welder
- International Pipe Welder
- Robotic Welding

- IIW Practitioner
- IIW Specialist
- Inspector to Specialist Bridging Course
- IIW Technologist
- IIW Engineer

- Welding Quality Control
- SAIW Welding and Fabrication Inspector Level 1
- Bridging IWI B to Level 1
- SAIW Welding and Fabrication Inspector Level 2
- IWIP Comprehensive
- Competent Person Course
- 5 Day Engineers – Appreciation of Welding
- ASME Code
- AWS D1.1
- Heat Treatment Practitioner
- Paint Inspector

- Visual Testing
- Eddy Current
- UTWT
- Industrial Radiographic Safety
- Portable Hardness Testing
- Appreciation of NDT for Engineers
- Penetrant Testing
- Magnetic Particle Testing
- Replica Metallography
- Radiographic Testing
- Ultrasonic Testing

- Artisan Welder
- Tradesman
- Boilermaker
- Pipe Welder
- Pipe Fitter
- Structural Steel Welder
- Welding Operator
- Artist/Sculptor
- Sheet Metal Worker
- Robotic Operator/ Programmer
- Safety Officer
- Welding School Instructor

- Welding Technologist
- Welding Engineer
- Robotic Operator
- Technical Sales Representative
- Estimator
- Welding/Fabrication Supervisor
- Project Manager
- Fabrication Workshop Manager
- Research & Development
- Fabrication Management
- Academic
- Quality Auditor
- Quality Engineer
- Fabrication Supervisor or Foreman

- Welding Lecturer
- Fabrication & Welding Inspector
- Competent Person - Pressure Vessels
- Competent Person - Steam Generators
- Quality Control Personnel
- Inspector of Pressurised Equipment
- Fabrication Foreman

- Eddy Current
- Magnetic Particle Testing
- Penetrant Testing
- Visual Testing
- Radiographic Testing
- Industrial Radiographic Safety
- Ultrasonic Testing
- UTWT
- Appreciation of NDT for Engineers
- Portable Hardness Testing
- Replica Metallography

CAREER PATHS

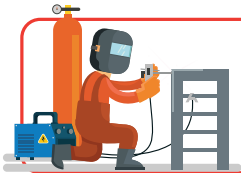
Welding Inspection

Welding Co-ordination

Practical Welding

Non-Destructive Testing

Would you like to become a Welding Inspector



You could work in any fabrication environment or the fuel or power generation sectors or even in a refinery or manufacturing plant.

Matric Maths
OR Science OR
Welding Quality
Control

START

– Qualification

Inspector Level 2

Inspector Level 1

Visual Testing 1

Gain two years' work experience

Ultrasonic Testing 1 – Wall Thickness

CERTIFIED
Level 2
Inspector

Visual Testing 2

CERTIFIED

Level 3
Inspector

OR

PATH 2

ASME Codes of Construction

Radiographic Testing -
Film RT Interpreters only

2 Years' IPE experience (18 tasks)

CERTIFIED

Inspector
of Pressure
Equipment
(SAQCC-IPE)

For more information,
our client liaison officer is standing by on
(084) 446-0629 | info@saiw.co.za

Would you like to become a Competent Persons (CP)?

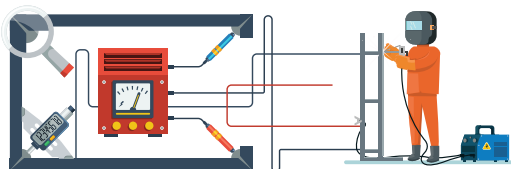
You could work with an Authorised Inspection Authority (AIA) during in-service inspection and testing of pressure equipment.

Matric Maths
OR Science OR
Welding Quality
Control

START



- Qualification



Inspector Level 1 or
CP Foundation



CP Pressure
Vessels



CP Steam
Generators

CP Experience

CERTIFIED

CP Steam
Generators



Process Plant
Inspection

CP Experience

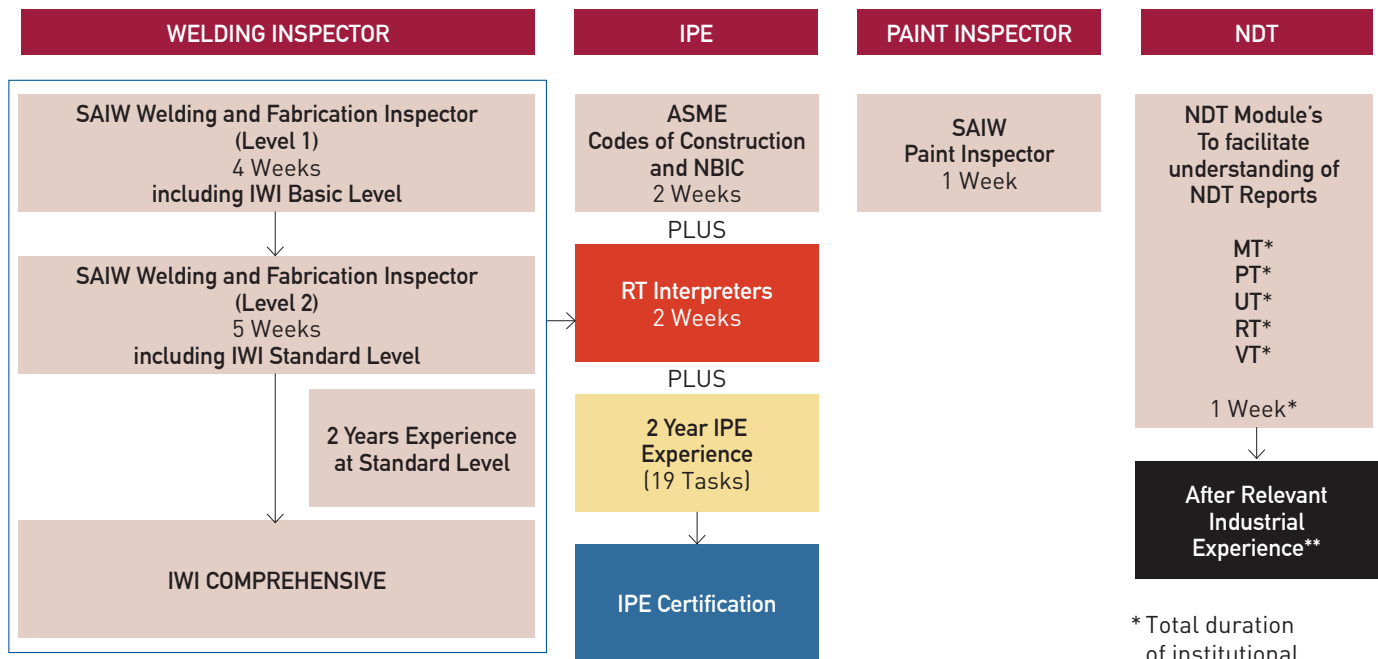
CERTIFIED

CP
Pressure
Vessels



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CAREER PLAN FOR INSPECTORS



* Total duration of institutional knowledge modules. Note that Level 1 qualification in the relevant method is a prerequisite for Level 2 courses of the same method.

** Industrial Experience is required at each level for each method.



