

SAIW Course Prospectus 2023: streamlined, demand-driven and career-focused

With the launch of its 2023 Course Prospectus, the SAIW has streamlined its approach to choosing a welding career pathway and modernised the scheduling of the training programmes on offer to flexibly meet national and regional demand in the most cost effective way possible.

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 the construction of petrochemical and power generation, buildings, transport vehicles and infrastructure. Because of the diversity of welding-related projects, there is excellent flexibility for professionally trained people to switch industries without the need for a career change.

The fact that welding is in a strong growth trend accounts for the mounting interest in welding careers. Successfully completing a course in welding can virtually assure a candidate of gainful employment, which includes many progression opportu-

nities and a successful career. Welders can progress to become welding inspectors, welding coordinators, non-destructive testing (NDT) technicians, professional welding engineers or designers and can look forward to extremely rewarding career opportunities, for example.

SAIW has been offering training courses in welding, weld inspection and NDT technologies since the late 1970s. Young people can choose to be practical welders joining plates, tubes and girders together using different materials and various welding processes.

Welding careers can progress by further study in welding coordination to become a welding supervisor/foreman. But 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, and become welding engineers, welding technologists or welding specialists managing day-to-day welding projects and implementing the welding construction codes and ISO standards, such as ISO 3834.

SAIW courses also present opportunities to enter careers as welding inspectors, who are responsible for verifying that welders are following work instructions and welding supervisors are doing their work according to approved welding procedures. Welding inspectors also work in quality assurance, compiling the relevant information for records on how a product was manufactured.

The SAIW offers Non-Destructive Testing (NDT) 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 that pose little risk to the end user. NDT Personnel test materials or products for any imperfections without destroying the products or materials.

NDT is not only limited to testing of welds, however, but can be extended to various product sectors – such as castings, forgings, and tubes – and applied in most industrial sectors, such as pre-and in-service testing, power generation and petrochemical industries. 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, 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, while SAIW practical welding courses are accred-

ited by IIW for the International Welder (IW) programme and welder apprenticeships by the South African Qualification Council for Trades and Occupations (QCTO).

Flexible demand-driven scheduling

The SAIW offers training courses at its Johannesburg headquarters, and in Durban and Cape Town, while many SAIW courses are also suitable for presentation at in-company training facilities.

In the past, all SAIW courses were scheduled in advance at the beginning of the year, with candidates invited to book for places according to pre-arranged dates. This approach could lead to course cancellations on one hand or, for popular courses, once a maximum number of candidates

had enrolled, additional bookings were rejected.

It was also particularly difficult to cost-effectively meet demand in regions such as Middleburg, Secunda, Durban or Cape Town. A scheduled course would often have to be cancelled at the last minute due to insufficient numbers, which was frustrating for students and companies.

With the new flexible scheduling approach, in Johannesburg, all SAIW courses are still being scheduled for at least once a year. For the Cape Town, Durban and Secunda regions, as soon as a viable number of candidates has registered an interest, any course can be scheduled, and a trainer and a venue booked.

Also, if the break-even number of stu-

dents is exceeded, additional courses can be scheduled to meet the demand, and these can run consecutively, if need be, until all interested students have had the opportunity to attend. Through this new approach, the SAIW can efficiently, quickly, and flexibly adapt to demand, while maximising the interactive benefits students get from each other, making for a richer and more enjoyable learning experience while minimising disappointment and maximising cost effectiveness.

Most importantly, though, it enables the SAIW to fully service training needs in every region of South Africa, including those where the Institute has not previously had a presence.

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Fast tracked IIW Welder qualification for experienced welders

The SAIW is proud to announce the launch of an exciting new streamlined international welder qualification via the new fast tracked IIW Standard Diploma for experienced welders.

At this year's 75th IIW Annual Assembly and International Conference in Tokyo, delegates approved the proposal to tailor the current IIW International Welder course to better suit experienced welders.

SAIW's Herman Potgieter says: "There is no doubt that there is a definite need for this type of international qualification, which creates a global benchmark of welding skill to advance standardisation and the enhancement of skills."

"It is also particularly relevant in South Africa where there are plenty of highly experienced and well established welders who don't yet have an IIW ISO 9606-certified global qualification, which precludes them from working on large projects. We want to grow the number of international welders in South Africa and across the African continent so that we no longer have to source foreign welders, but can rather utilise local welders who are internationally qualified."

The idea is to shorten the IIW International Welder course for a particular area of welding expertise. Most welders are highly experienced in one position and one area and do not want to or need to go through the entire IIW programme again. They, therefore, require a focused qualification that recognises their specific area of expertise.

For example, a structural steel welder would prefer to focus on plate welding theory while tube welders in the petrochemical or power generation sectors are far more familiar with specialised tube

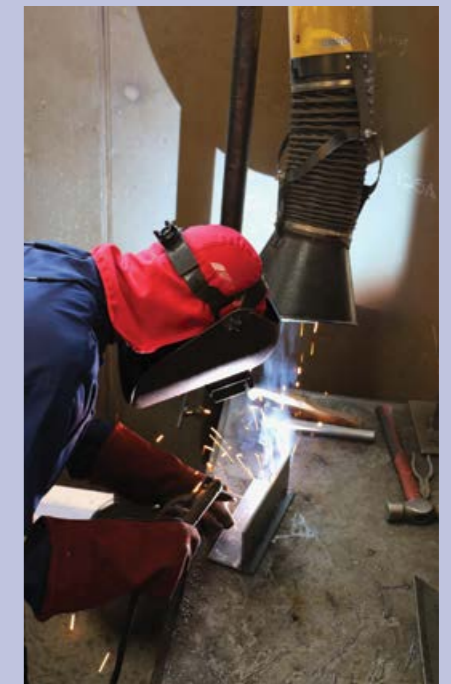
welding, which forms the bulk of what they do.

The new streamlined option bypasses the need to go back to basics and complete the full course. It may not be as comprehensive and offer all processes, materials and welding positions, but it does provide the highly specialised knowledge and assessment to take experienced welders to the next level. Upon completion of the course, students get an IIW International Welder certificate proving they have been trained in a specific position, process and material.

The benefit of the new approach becomes clear when one considers that at present the IIW course for a beginner welder takes around 26 weeks for one welding process at an approximate cost of R166 260 (progress dependent). The introduction of the new format IIW Standard Diploma means that experienced welders can supercharge their training process over one to two weeks – including all training, assessment (examination), materials and welder qualification tests – at a cost of around R18 290, a cost saving of nearly 90%!

The IIW Standard Diploma covers the theory behind a single welding process either fillet, plate or tube in the form of lectures as well as written and practical tests. If these are passed the student receives an IIW Diploma and a Welding Certificate of record, which provides unequivocal proof that the welder complies with the IIW standards.

"To access the course, a student must



The SAIW is proud to announce the launch of the new fast tracked IIW Standard Diploma for experienced welders.

have been a full-time welder for at least two of the previous three years and possess a valid welder qualification certificate. They also have to have a CV with the endorsement from a current or previous employer," explains Potgieter.

Certification at an international level makes welders much more marketable both locally and overseas.

The IIW qualification is also the perfect springboard for more advanced careers in welding, such as inspection and coordination. These jobs add much needed depth of experience on welding projects at ground level and the higher level skills that are often lacking on key projects.

