American Welding Society (AWS) SENSE Welding Level 1



FACT SHEET

The American Welding Society (AWS) SENSE Welding Level 1 programme is designed for persons aspiring to become certified welders. This qualification focuses on the practical skills and underpinning knowledge required to work in fabrication and welding and is therefore an excellent starting point for anyone seeking a career as a welder.

Assessment is undertaken through a combination of practical assignments and written examinations to verify that each learner has attained a broad range of welding related competencies. Learners are required to successfully complete a series of written exams to gain the certificates. These written exams cover a wide breadth of welding theory, ranging from welding safety, welding process fundamentals and even welding inspection. Additionally, Learners are required to also complete practical welding assessments relating to the four (4) welding processes for Shielded metal arc welding (SMAW) also known as Manual metal arc welding (MMA or MMAW), Gas metal arc welding (GMAW), Gas tungsten arc welding (GTAW) and Flux cored arc welding (FCAW).

What is SENSE?

SENSE – Schools Excelling through National Skills Education - is a set of specifications and guidelines meant to assist schools in training welders. The program guidelines were originally published in 1995 and 1996 through grants received from the U.S. Department of Education and Department of Labor. Based on a survey of the welding industry, the SENSE guidelines define two levels of knowledge and skills required in the welding workplace. Individuals trained in Training Organizations aligned to the SENSE guidelines may implement SENSE Level I: Entry Welder and/or SENSE Level II: Advanced Welder.

The SENSE specifications and guidelines were created and continue to be maintained by a committee of expert volunteers from all corners of the welding industry. These industry representatives work hard to ensure that a trainee completing a program built on the SENSE specifications and guidelines will have the skills to be both hirable and productive within the welding industry.

Trainees that complete a SENSE-compliant training program are eligible to receive an AWS SENSE certificate and wallet card. The SENSE program includes four different certificates that a trainee can earn, one for each welding process offered (SMAW, GMAW, GTAW, and FCAW).

Duration

This qualification can be completed in **one (1) year.** There are two (2) intakes per year in May and October.

Pre-requisites

There are no pre-requisites for this programme. However, basic knowledge in Mathematics will be an asset.

Mode of Study

Classes for this programme will be on evenings and Saturdays at SBCS GLI Champs Fleurs Campus.

Page 1 29/04/2025

American Welding Society (AWS) SENSE Welding Level 1



Programme Structure:

Semester 1	Semester 2	
(October 2025 – March 2026)	(April 2026 – October 2026)	
 Introduction to Safety and Health of Welders Drawing and Welding Symbol Interpretation Thermal Cutting Processes 1 &2 Shielded Metal Arc Welding 1 & 2 	 Gas Metal Arc Welding Flux Core Arc Welding Gas Tungsten Arc Welding Welding Inspection and Testing Principles 	

Assessments

This qualification will be assessed by a combination of written examinations and practical assessments.

Fee Schedule

Fees for this programme are as follows:

FEE	AMOUNT	NOTE
SBCS Registration Fee	TT\$500	Payable upon registration
AWS Sense Registration Fee	US\$25 (one-time payment)	Payable by: November 30 th , 2025
Tuition Fee	TT\$15,000	(Payment Plan available)
Examination Fee	US\$350	Payable by: April 15th, 2026

NOTE:

All SBCS Fees in US dollars must be paid via <u>bank draft</u> payable to "SBCS Global Learning Institute Limited". Please include your name on the bank draft in the B/O (by order of) section.

Page 2 29/04/2025



UNIT OUTLINE

	UNITS			
Unit		Competencies	Assessment	
1	Introduction to Safety and Health of Welders	Understand the function of a welder in industry including knowledge of shop operations	Instructor observation of safe operational practices	
		2. Demonstrate proper safe operation practices in the work area, as described in ANSI Z 49.2 Section 4, Protection of personnel and the general area & ANSI Z 49, Part 1 General Aspects and applicable OSHA regulations.	Sense Module 2 Test (ANSI Z 49.1)	
2	Drawing and	Evaluate welding drawings or sketches	Written test score 75%	
	Welding Symbol Interpretation	2. Interpret welding symbol information	minimum	
	merpretation	3. Perform conversion between US and SI units		
		4. Produce a multi-view sketch		
3	Thermal Cutting Processes 1 & 2	 Oxy-fuel cutting 1. Evaluate cutting equipment, accessories and consumables to ensure proper safety and operations 2. Produce manual Oxyfuel cuts on carbon steel 3. Produce mechanized Oxyfuel cuts on carbon steel 4. Perform scarfing and gouging operations to remove base and weld metal on carbon steel 5. Evaluate cuts to ensure AWS D.1.1 standards are met Plasma Arc cutting Produce manual plasma arc cuts on carbon steel Perform scarfing and gouging operations to remove base and weld metal on carbon steel Evaluate cuts to ensure AWS D.1.1 standards are met 	Written Test Score 75% minimum Visual Inspection Passed	
4	Shielded Metal Arc Welding 1 & 2	 Evaluate SMAW equipment, accessories and consumables to ensure proper safety and operations Produce fillet welds in flat, horizontal, vertical and overhead positions on carbon steel Produce groove welds in flat, horizontal, vertical and overhead positions on carbon steel Evaluate welds to ensure AWS D.1.1 standards are met 	Written Test Score 75% minimum Visual Inspection Passed Destructive Test Passed	
5	Gas Metal Arc Welding	Evaluate GMAW equipment, accessories and	Written Test Score 75%	

All financial information provided by SBCS is subject to change

American Welding Society (AWS) SENSE Welding Level 1



	consumables to ensure proper safety and operations	minimum
	2. Produce fillet welds in all positions on carbon steel	Visual Inspection Passed
	3. Produce groove welds in all positions on carbon steel	
	4. Evaluate welds to ensure AWS D.1.1 standards are met	
6 Flux Core Arc	<u>Self-Shielded</u>	Written Test Score 75%
Welding	1. Evaluate FCAW-Self Shielded equipment, accessories	minimum
	and consumables to ensure proper safety and operations	Visual Inspection Passed
	2. Produce fillet welds in all positions on carbon steel	
	3. Produce groove welds in all positions on carbon steel	
	4. Evaluate welds to ensure AWS D.1.1 standards are met	
	<u>Gas-Shielded</u>	
	Evaluate FCAW-Gas Shielded equipment, accessories and consumables to ensure proper safety and operations	
	2. Produce fillet welds in all positions on carbon steel	
	3. Produce groove welds in all positions on carbon steel	
	4. Evaluate welds to ensure AWS D.1.1 standards are met	
7 Gas Tungsten Arc Welding	Evaluate GTAW equipment, accessories and consumables to ensure proper safety and operations	Written Test Score 75% minimum
	2. Produce fillet welds in all positions on carbon steel, Aluminum and Stainless Steel	Visual Inspection Passed
	3. Produce groove welds in all positions on carbon steel, Aluminum and Stainless Steel	
	4. Evaluate welds to ensure AWS D.1.1 standards are met	
8 Welding Inspection and	Evaluate cut surfaces and edges of prepared base	Written Test Score 75%
Testing Principles	metal parts	minimum
	Evaluate tacks, root passes, intermediate layers and completed welds	Passed the visual inspection of a written test

Contact Information

Further information can be found on the SBCS website:

http://www.sbcs.edu.tt/academic-centre/centre-for-information-technology-and-engineering/

Course Administrators can also be contacted directly via:

Campus	Telephone: 663-SBCS (7227)	Email
Champs Fleurs	Extensions: 1098/1095/1094/1093	CITE-Eng@sbcs.edu.tt



Refunds and Payment Plans Policy

- 1. Requests for refunds on certificate, diploma, degree and professional Programmes must be made within one (1) month of the start of classes. In each instance, no refunds will be granted thereafter.
- 2. Refunds on certificate, diploma, degree and professional Programmes are subject to an administrative charge of 25% of the tuition cost/module(s)/course fee OR \$500 per module/course, whichever is greater. Registration fees and course materials purchased are non-refundable.
- 3. Students in receipt of exemptions after registering for a course qualify for a refund subject to conditions (1) and (2)
- 4. When accessing a payment plan a 15% Penalty Fee will be applicable to instalments not paid on the agreed due date unless prior approval to defer is received from the Finance Department.
- 5. It is understood that should you fail to meet your payment obligations, SBCS reserves the right to deny you access to face to face or on-line classes; to restrict your access to on-line resources and to withhold certificates and awards until payment is made in full.

Payment Plan & Schedule

AWS SENSE Welding Level 1 Payment Plan			
Payment Schedule:	Total Tuition = \$15,000		
Fee	Due Date	Amount	
Registration fee	Payable upon registration	\$500	
Tuition Instalment	Payable upon registration	\$2,250	
AWS SENSE Registration fee (payable by bank draft in US\$ only)	30-November-25	US\$25	
Exam Fees (payable by bank draft in US\$ only)	15-April-26	US\$350	
Tuition Installment	30-Nov-25	\$2,125	
Tuition Installment	30-Dec-25	\$2,125	
Tuition Installment	30-Jan-26	\$2,125	
Tuition Installment	30-Feb-26	\$2,125	
Tuition Installment	30-Mar-26	\$2,125	
Tuition Installment	30-Apr-26	\$2,125	

Page 5 29/04/2025