

Title: Semi-automatic Welding GMAW and FCAW

Code: 4750

Credits: 44

Duration: 660 hours

Training sector: Metallurgical Technology (16)

Certification of studies: Skills Training Certificate (STC) (awarded exclusively by the educational organizations)

Authorized in: 2021

Mandated school service centres or school boards: de la Beauce-Etchemin, des Navigateurs

Participating school service centres or school boards: N/A

Occupation: Welding Machine Operator

Program of study objectives: Train welders to work with semi-automatic welding machines on steel and stainless steel. The welding techniques covered in this program of study are mainly GMAW with FCAW as a supplementary training. At the end of this training, the person will be able to work in various industries specializing in welding.

Conditions of admission:

A person who meets the following conditions is eligible for admission to a program of study leading to an STC:

- 1** Has obtained at least Secondary III credits or the equivalent in the language of instruction, second language and mathematics;
 - or** Has obtained an Attestation of Equivalence of Secondary Studies (AESS);
 - or** Has successfully completed the General Development Test (GDT) with or without specific prerequisites.
- 2** Has interrupted their full-time studies for at least 12 months;
 - or** Is 18 years old when entering training;
 - or** Has obtained a Secondary School Diploma (SSD) or a Diploma of Vocational Studies (DVS) or their equivalent;
 - or** Meets the eligibility conditions of Emploi-Québec's workforce training measure.

This program is accessible via the [TCST-STC bridge](#).

PROGRAM OF STUDY CONTENT

AEP Code	Statement of the Competency	Hours
AEP 750-012	Determine their suitability for the trade and training process	30
AEP 750-022	Prevent health, safety and environmental hazards	30
AEP 750-032	Perform welding calculations	30
AEP 750-042	Operate lifting and handling equipment	30
AEP 750-053	Perform thermal cutting of metal parts	45
AEP 750-066	Interpret simple assembly plans and draw sketches	90
AEP 750-077	Weld steel and stainless steel parts using the GMAW process in the flat and horizontal positions	105
AEP 750-082	Establish welding and cutting procedures	30
AEP 750-096	Weld steel parts using the FCAW process in the flat and horizontal positions	90
AEP 750-105	Produce simple assemblies	75
AEP 750-111	Prepare for their career path	15
AEP 750-126	Enter the workforce	90

Recognition of acquired competencies is possible for candidates enrolled in one of the following DVS programs of study: *Welding and Fitting* or *Soudage-assemblage*.

Documentation available upon request

- Work Situation or Profession Analysis Report (Rapport de l'AST ou de l'AP)
- Proposed Training Plan (Projet de formation)
- Harmonization Table (Tableau d'harmonisation)
- Program of Study (Programme d'études)
- Organizational Guide (Guide d'organisation)
- Evaluation Framework (Cadre d'évaluation)
- RAC Tools (Instrumentation RAC)