**Course Outline:**

**Basic Communication C7.i**

**Employability Skills C8.i**

- Opportunities related to the HVACR program.

-Personal evaluations

-Career options and pathways

-Job Applications and resume’

-Skills/USA opportunities

**Basic Safety C1.i**

-Apply safety rules, regulations, and procedures for HVACR.

-General safety

-Shop Safety Test -100% correct

**Introduction to Construction Math C2.i**

- Demonstrate the use of basic technical mathematics skills.

-Heating and Cooling mathematic problems

-Ruler measurements reading

-Drill press and Grinder Shop metal project

**Introduction to Hand tools C3.i**

**Introduction to Power Tools C4.i**

- Hand tool identification and use.

-Hand tools and application

-Hand tool activities and performance tasks

**Working with Copper Pipe** **-Heating and Cooling Essentials**

- Construct fittings, including flare connections and swage joints, to specifications.

-Shop work; swaging and flaring

-Bending shop project

**Soft Soldering -Heating and Cooling Essentials**

-Demonstrate soft soldering safety and flux processes, including lighting and adjusting torch, soft soldering copper fittings and tubing, introduction to silver brazing, & Gauge manifold introduction.

-Soft soldering practice and mastering

-Creative copper project

-Soft soldering project -12 in square

**Introduction to Construction Drawings C5.i**

- Interpret blueprints for HVACR, including symbols, components, and specifications.

-Read shop layout and blueprints

-Blueprint table and scale reading

**Introduction to Material Handling C9.i**

- Recognize hazards associated with material handling and proper material techniques and procedures.

-Performance tasks for material handling