****

**Core Skills Signposting**

|  |  |
| --- | --- |
| **Sector** | Engineering & Advanced Manufacturing |
| **Qualification Title(s)** | SVQ Performing Engineering Operations at SCQF Level 5 |
| **Developed by** | SEMTA |
| **Approved by ACG** | 26 February 2020 |
| **Version**  | 1 |

## **Introduction**

Core Skills signposting indicates if there are opportunities within units to develop Core Skills in the workplace to a specified SCQF level. The signposting document should also acknowledge where there are no opportunities to develop Core Skills. This signposting can be used by providers and assessors to plan the development and assessment of Core Skills.

The five Core Skills are:

 Communication

 Information and Communication Technology

 Numeracy

 Problem Solving

 Working with Others

This document signposts opportunities for learners completing the SVQ in Performing Engineering Operations at SCQF Level 5, to use their SVQ evidence towards achieving Core Skills units. The SVQ units are most likely to provide evidence towards Core Skills units at SCQF Levels 5 and 6. This document contains signposting to both SCQF level 5 and SCQF Level 6 Core Skills. The signposting to Core Skills at SCQF level 5 and SCQF Level 6 is summarised in the following tables.

Engineering operations provide many opportunities for learners to generate evidence of communicating and working with others, solving problems, and using number to measure, calculate and check tolerances and accuracy of work. Some SVQ units provide explicit opportunities to use ICT; particularly CNC and CAD software. Learners may need other opportunities to generate further ICT evidence.

The signposting shows which SVQ units may generate evidence **towards** a signposted Core Skill. It does not imply the SVQ units provide full coverage of Core Skills. Learners are expected to produce additional evidence, when needed, to achieve their Core Skills.

## **Core Skills Signposting to SCQF Level 5**

|  |
| --- |
| **SVQ Performing Engineering Operations (SCQF Level 5)** |
| **URN** | **Unit title** | **Communication** | **ICT** | **Numeracy** | **Problem****Solving** | **Working with Others** |
| **Mandatory section** |
| SEMMAN123-01 | Complying with statutory regulations and organisational safety requirements | **✓** |  |  | **✓** | **✓** |
| SEMMAN23-02 | Using and interpreting engineering data and documentation | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMMAN3-03 | Working efficiently and effectively in engineering | **✓** |  |  | **✓** | **✓** |
| **Group A** |
| SEMPEO204 | Producing mechanical engineering drawings using a CAD system  | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO205 | Producing components using hand fitting techniques | **✓** |  | **✓** | **✓** | **✓** |
| SEMPEO206 | Producing mechanical assemblies | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO207 | Forming and assembling pipework systems | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO208 | Carrying out aircraft detail fitting activities | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO209 | Installing aircraft mechanical fasteners | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO210 | Producing aircraft detail assemblies | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO211 | Preparing and using lathes for turning operations | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO212 | Preparing and using milling machines | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO213 | Preparing and using grinding machines | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO214 | Preparing and proving CNC machine tool programs | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO215 | Preparing and using CNC turning machines | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO216 | Preparing and using CNC milling machines | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO217 | Preparing and using CNC machining centres | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO218 | Preparing and using industrial robots | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO219 | Maintaining mechanical devices and equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO220 | Assembling and testing fluid power systems | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO221 | Maintaining fluid power equipment | **✓** |   | **✓** | **✓** | **✓** |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with others** |
| SEMPEO222 | Producing sheet metal components and assemblies | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO223 | Producing platework components and assemblies | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO224 | Cutting and shaping materials using thermal cutting equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO225 | Preparing and proving CNC fabrication machine tool programs | **✓** |  **✓** | **✓** | **✓** | **✓** |
| SEMPEO226 | Preparing and using CNC fabrication machinery | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO227 | Preparing and using manual metal arc welding equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO228 | Preparing and using manual TIG or plasma-arc welding equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO229 | Preparing and using semi-automatic MIG, MAG and flux cored arc welding equipment  | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO230 | Preparing and using manual oxy/fuel gas welding equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO231 | Preparing and using manual flame brazing and braze welding equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO232 | Producing electrical or electronic engineering drawings using a CAD system  | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO233 | Wiring and testing electrical equipment and circuits | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO234 | Forming and assembling electrical cable enclosure and support systems | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO235 | Assembling, wiring and testing electrical panels/components mounted in enclosures | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO236 | Assembling and testing electronic circuits | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO237 | Maintaining electrical equipment/systems | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO238 | Maintaining electronic equipment/systems | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO239 | Maintaining and testing process instrumentation and control devices | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO240 | Wiring and testing programmable controller based systems | **✓** | **✓** | **✓** | **✓** | **✓** |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with others** |
| SEMPEO241 | Using wood for pattern, modelmaking and other engineering applications | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO242 | Assembling pattern, model and engineering woodwork components | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO244 | Producing composite mouldings using Pre-Preg techniques | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO245 | Producing composite mouldings using resin flow infusion techniques | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO246 | Producing composite assemblies | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO252 | Finishing surfaces by applying coatings or coverings | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO254 | Carrying out heat treatment of engineering materials | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO261 | Producing CAD models (drawings) using a CAD system | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO262 | Producing engineering project plans | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO263 | Using computer software packages to assist with engineering activities | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMPEO264 | Conducting business improvement activities | **✓** |  | **✓** | **✓** | **✓** |
| SEMPEO265 | General machining, fitting and assembly applications | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO266 | General fabrication and welding applications | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO267 | General electrical and electronic engineering applications | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO268 | General maintenance engineering applications | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO270 | Assembling structural sub assemblies to produce a public service vehicle | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO271 | Fitting sub assemblies and components to public service vehicles | **✓** |   | **✓** | **✓** | **✓** |
| SEMPEO273 | Producing composite mouldings using resin film infusion techniques | **✓** |   | **✓** | **✓** | **✓** |
| **Group B** |
| SEMMME205 | Operating centre lathes | **✓** |   | **✓** | **✓** | **✓** |
| SEMMME208 | Operating milling machines | **✓** |   | **✓** | **✓** | **✓** |
| SEMMME219 | Operating CNC turning machines | **✓** |  | **✓** | **✓** | **✓** |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with others** |
| SEMMME220 | Operating CNC milling machines | **✓** |  | **✓** | **✓** | **✓** |
| SEMMME224 | Operating CNC electro-discharge machines | **✓** |  | **✓** | **✓** | **✓** |
| SEMMME226 | Operating CNC machining centres | **✓** |  | **✓** | **✓** | **✓** |
| SEMMME227 | Producing mechanical sub-assemblies/assemblies | **✓** |  | **✓** | **✓** | **✓** |
| SEMMME228 | Assembling fluid power components to mechanical equipment | **✓** |  | **✓** | **✓** | **✓** |
| SEMMME229 | Assembling electrical or electronic components to mechanical equipment | **✓** |  | **✓** | **✓** | **✓** |
| SEMMME230 | Assembling pipework components to mechanical equipment | **✓** |  | **✓** | **✓** | **✓** |
| SEMEMI204 | Handing over and confirming completion of maintenance or installation | **✓** |   |  | **✓** | **✓** |
| SEMEMI205 | Carrying out fault location on mechanical equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI206 | Carrying out maintenance activities on mechanical equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI2-07 | Restoring mechanical components to usable condition by repair | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI208 | Carrying out scheduled maintenance activities on mechanical equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI209 | Carrying out fault location on electrical equipment and circuits | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI210 | Carrying out maintenance activities on electrical equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI211 | Carrying out modifications or rewiring electrical circuits | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI212 | Carrying out scheduled maintenance tasks on electrical equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI216 | Carrying out fault location on fluid power equipment and circuits | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI217 | Carrying out maintenance activities on fluid power equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI218 | Carrying out scheduled maintenance tasks on fluid power equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI219 | Carrying out fault location on service systems and equipment | **✓** |   | **✓** | **✓** | **✓** |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with others** |
| SEMEMI220 | Carrying out scheduled maintenance tasks on service systems and equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI227 | Carrying out maintenance on compressed air equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMEMI247 | Assisting in the installation of mechanical equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE205 | Joining materials by the semi-automatic MIG/MAG and flux cored arc processes | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE208 | Producing fillet welded joints using a manual/semi-automatic welding process | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE209 | Welding materials with mechanised arc welding equipment | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE221 | Marking out components for fabrication | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE222 | Cutting sheet metal to shape using hand and machine tools | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE223 | Forming sheet metal using hand and machine tools | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE224 | Producing sheet metal assemblies | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE226 | Cutting and shaping materials using CNC laser profiling machines | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMFWE227 | Cutting and shaping using CNC plasma or gas cutting machines | **✓** | **✓** | **✓** | **✓** | **✓** |
| SEMFWE228 | Assembling components using mechanical fasteners | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE231 | Slinging, lifting and moving materials and components | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE232 | Cutting plate and sections using shearing machines | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE235 | Cutting materials using saws and abrasive discs | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE236 | Bending and forming plate using power operated machines | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE238 | Producing platework assemblies | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE239 | Producing holes using drilling machines | **✓** |   | **✓** | **✓** | **✓** |
| SEMFWE241 | Producing structural steel ancillary components | **✓** |   | **✓** | **✓** | **✓** |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving**  | **Working with others** |
| SEMFWE242 | Assembling structural steelwork | **✓** |   | **✓** | **✓** | **✓** |
| SEMME2119 | Assisting in the installation of wooden furniture/outfitting units for yachts and boats | **✓** |   | **✓** | **✓** | **✓** |
| SEMME2122 | Fitting seating, interior panels, soft furnishing and trim in yachts and boats | **✓** |   | **✓** | **✓** | **✓** |
| SEMME2123 | Carrying out repairs to yacht and boat wooden components and assemblies | **✓** |   | **✓** | **✓** | **✓** |
| SEMME2124 | Carrying out repairs to yacht and boat composite components | **✓** |   | **✓** | **✓** | **✓** |

*All signposting refers to* ***SCQF level 5*** *core skills - any blanks indicate no opportunity.*

**Core Skills Signposting to SCQF Level 6**

|  |
| --- |
| **SVQ in Performing Engineering Operations (SCQF Level 5)** |
| **URN** | **Unit title** | **Communication** | **ICT** | **Numeracy** | **Problem****Solving** | **Working with Others** |
| **Mandatory**  |
| SEMMAN123-01 | Complying with statutory regulations and organisational safety requirements |  |  |  |  |  |
| SEMMAN23-02 | Using and interpreting engineering data and documentation |  |  |  |  |  |
| SEMMAN3-03 | Working efficiently and effectively in engineering |  |  |  | **✓** |  |
| **Group A** |
| SEMPEO204 | Producing mechanical engineering drawings using a CAD system  |  | ✓ |  |  |  |
| SEMPEO205 | Producing components using hand fitting techniques |  |  |  |  |  |
| SEMPEO206 | Producing mechanical assemblies |  |  |  |  |  |
| SEMPEO207 | Forming and assembling pipework systems |  |  |  |  |  |
| SEMPEO208 | Carrying out aircraft detail fitting activities |  |  |  |  |  |
| SEMPEO209 | Installing aircraft mechanical fasteners |  |  |  |  |  |
| SEMPEO210 | Producing aircraft detail assemblies |  |  |  |  |  |
| SEMPEO211 | Preparing and using lathes for turning operations |  |  |  |  |  |
| SEMPEO212 | Preparing and using milling machines |  |  |  |  |  |
| **URN** | **Unit Title** | **Communication**  | **ICT** | **Numeracy** | **Problem Solving** | **Working with Others** |
| SEMPEO213 | Preparing and using grinding machines |  |  |  |  |  |
| SEMPEO214 | Preparing and proving CNC machine tool programs |  |  |  |  |  |
| SEMPEO215 | Preparing and using CNC turning machines |  |  |  |  |  |
| SEMPEO216 | Preparing and using CNC milling machines |  |  |  |  |  |
| SEMPEO217 | Preparing and using CNC machining centres |  |  |  |  |  |
| SEMPEO218 | Preparing and using industrial robots |  | ✓ |  |  |  |
| SEMPEO219 | Maintaining mechanical devices and equipment |  |  |  | ✓ |  |
| SEMPEO220 | Assembling and testing fluid power systems |  |  |  | ✓ |  |
| SEMPEO221 | Maintaining fluid power equipment |  |  |  | ✓ |  |
| SEMPEO222 | Producing sheet metal components and assemblies |  |  |  |  |  |
| SEMPEO223 | Producing platework components and assemblies |  |  |  |  |  |
| SEMPEO224 | Cutting and shaping materials using thermal cutting equipment |  |  |  |  |  |
| SEMPEO225 | Preparing and proving CNC fabrication machine tool programs |  | ✓ |  |  |  |
| SEMPEO226 | Preparing and using CNC fabrication machinery |  | ✓ |  |  |  |
| SEMPEO227 | Preparing and using manual metal arc welding equipment |  |  |  |  |  |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with others** |
| SEMPEO228 | Preparing and using manual TIG or plasma-arc welding equipment |  |  |  |  |  |
| SEMPEO229 | Preparing and using semi-automatic MIG, MAG and flux cored arc welding equipment  |  |  |  |  |  |
| SEMPEO230 | Preparing and using manual oxy/fuel gas welding equipment |  |  |  |  |  |
| SEMPEO231 | Preparing and using manual flame brazing and braze welding equipment |  |  |  |  |  |
| SEMPEO232 | Producing electrical or electronic engineering drawings using a CAD system  |  | ✓ | ✓ |  |  |
| SEMPEO233 | Wiring and testing electrical equipment and circuits |  |  |  |  |  |
| SEMPEO234 | Forming and assembling electrical cable enclosure and support systems |  |  |  |  |  |
| SEMPEO235 | Assembling, wiring and testing electrical panels/components mounted in enclosures |  |  |  |  |  |
| SEMPEO236 | Assembling and testing electronic circuits |  |  |  | ✓ |  |
| SEMPEO237 | Maintaining electrical equipment/systems |  |  |  | ✓ |  |
| SEMPEO238 | Maintaining electronic equipment/systems |  |  |  | ✓ |  |
| SEMPEO239 | Maintaining and testing process instrumentation and control devices |  |  |  | ✓ |  |
| SEMPEO240 | Wiring and testing programmable controller based systems |  | ✓ |  | ✓ |  |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with others** |
| SEMPEO241 | Using wood for pattern, model making and other engineering applications |  |  |  |  |  |
| SEMPEO242 | Assembling pattern, model and engineering woodwork components |  |  |  |  |  |
| SEMPEO244 | Producing Composite Mouldings using Pre-Preg Techniques |  |  |  |  |  |
| SEMPEO245 | Producing Composite Mouldings using Resin Flow Infusion Techniques |  |  |  |  |  |
| SEMPEO246 | Producing composite assemblies |  |  |  |  |  |
| SEMPEO252 | Finishing surfaces by applying coatings or coverings |  |  |  |  |  |
| SEMPEO254 | Carrying out heat treatment of engineering materials |  |  |  |  |  |
| SEMPEO261 | Producing CAD models (drawings) using a CAD system |  | ✓ |  | ✓ |  |
| SEMPEO262 | Producing engineering project plans | ✓ |  |  | ✓ |  |
| SEMPEO263 | Using computer software packages to assist with engineering activities |  | ✓ |  |  |  |
| SEMPEO264 | Conducting business improvement activities | ✓ |  |  | ✓ |  |
| SEMPEO265 | General machining, fitting and assembly applications |  |  |  |  |  |
| SEMPEO266 | General fabrication and welding applications |  |  |  |  |  |
| SEMPEO267 | General electrical and electronic engineering applications |  |  |  |  |  |
| SEMPEO268 | General maintenance engineering applications |  |  |  | ✓ |  |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with others** |
| SEMPEO270 | Assembling structural sub assemblies to produce a public service vehicle |  |  |  |  |  |
| SEMPEO271 | Fitting sub assemblies and components to public service vehicles |  |  |  |  |  |
| SEMPEO273 | Producing composite mouldings using resin film infusion techniques |  |  |  |  |  |
| **Group B** |
| SEMMME205 | Operating centre lathes |  |  |  |  |  |
| SEMMME208 | Operating milling machines |  |  |  |  |  |
| SEMMME219 | Operating CNC turning machines |  |  |  |  |  |
| SEMMME220 | Operating CNC milling machines |  |  |  |  |  |
| SEMMME224 | Operating CNC electro-discharge machines |  |  |  |  |  |
| SEMMME226 | Operating CNC machining centres |  |  |  |  |  |
| SEMMME227 | Producing mechanical sub-assemblies/ assemblies |  |  |  |  |  |
| SEMMME228 | Assembling fluid power components to mechanical equipment |  |  |  |  |  |
| SEMMME229 | Assembling electrical or electronic components to mechanical equipment |  |  |  |  |  |
| SEMMME230 | Assembling pipework components to mechanical equipment |  |  |  |  |  |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with others** |
| SEMEMI204 | Handing over and confirming completion of maintenance or installation | **✓** |  |  | **✓** |  |
| SEMEMI205 | Carrying out fault location on mechanical equipment | **✓** |  |  | **✓** |  |
| SEMEMI206 | Carrying out maintenance activities on mechanical equipment |  |  |  |  |  |
| SEMEMI207 | Restoring mechanical components to usable condition by repair |  |  |  | **✓** |  |
| SEMEMI208 | Carrying out scheduled maintenance activities on mechanical equipment |  |  |  |  |  |
| SEMEMI209 | Carrying out fault location on electrical equipment and circuits | **✓** |  |  | **✓** |  |
| SEMEMI210 | Carrying out maintenance activities on electrical equipment |  |  |  |  |  |
| SEMEMI211 | Carrying out modifications or rewiring electrical circuits |  |  |  |  |  |
| SEMEMI212 | Carrying out scheduled maintenance tasks on electrical equipment |  |  |  |  |  |
| SEMEMI216 | Carrying out fault location on fluid power equipment and circuits | **✓** |  |  | **✓** |  |
| SEMEMI217 | Carrying out maintenance activities on fluid power equipment |  |  |  |  |  |
| SEMEMI218 | Carrying out scheduled maintenance tasks on fluid power equipment |  |  |  |  |  |
| SEMEMI219 | Carrying out fault location on service systems and equipment | **✓** |  |  | **✓** |  |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with others** |
| SEMEMI220 | Carrying out scheduled maintenance tasks on service systems and equipment |  |  |  |  |  |
| SEMEMI227 | Carrying out maintenance on compressed air equipment |  |  |  |  |  |
| SEMEMI247 | Assisting in the installation of mechanical equipment |  |  |  |  |  |
| SEMFWE205 | Joining materials by the semi-automatic MIG/MAG and flux cored arc processes |  |  |  |  |  |
| SEMFWE208 | Producing fillet welded joints using a manual/semi-automatic welding process |  |  |  |  |  |
| SEMFWE209 | Welding materials with mechanised arc welding equipment |  |  |  |  |  |
| SEMFWE221 | Marking out components for fabrication |  |  |  |  |  |
| SEMFWE222 | Cutting sheet metal to shape using hand and machine tools |  |  |  |  |  |
| SEMFWE223 | Forming sheet metal using hand and machine tools |  |  |  |  |  |
| SEMFWE224 | Producing sheet metal assemblies |  |  |  |  |  |
| SEMFWE226 | Cutting and shaping materials using CNC laser profiling machines |  | ✓ |  |  |  |
| SEMFWE227 | Cutting and shaping using CNC plasma or gas cutting machines |  | ✓ |  |  |  |
| SEMFWE228 | Assembling components using mechanical fasteners |  |  |  |  |  |
| SEMFWE231 | Slinging, lifting and moving materials and components |  |  |  |  |  |
| **URN** | **Unit Title** | **Communication** | **ICT** | **Numeracy** | **Problem Solving** | **Working with Others** |
| SEMFWE232 | Cutting plate and sections using shearing machines |  |  |  |  |  |
| SEMFWE235 | Cutting materials using saws and abrasive discs |  |  |  |  |  |
| SEMFWE236 | Bending and forming plate using power operated machines |  |  |  |  |  |
| SEMFWE238 | Producing plate work assemblies |  |  |  |  |  |
| SEMFWE239 | Producing holes using drilling machines |  |  |  |  |  |
| SEMFWE241 | Producing structural steel ancillary components |  |  |  |  |  |
| SEMFWE242 | Assembling structural steelwork |  |  |  |  |  |
| SEMME2119 | Assisting in the installation of wooden furniture/outfitting units for yachts and boats |  |  |  |  |  |
| SEMME2122 | Fitting seating, interior panels, soft furnishing and trim in yachts and boats |  |  |  |  |  |
| SEMME2123 | Carrying out repairs to yacht and boat wooden components and assemblies |  |  |  |  |  |
| SEMME2124 | Carrying out repairs to yacht and boat composite components |  |  |  |  |  |

*All signposting refers to* ***SCQF level 6*** *core skills - any blanks indicate no opportunity.*