

MAURITIUS QUALIFICATIONS AUTHORITY

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# NATIONAL CERTIFICATE

## LEVEL 3

## IN

## SHEET METAL FABRICATION

## NATIONAL CERTIFICATE LEVEL 3 IN SHEET METAL FABRICATION

3

- 1. Level:
- 2. Credits: 120
- 3. Review Date: June 2021

#### 4. Access to qualification

#### 4.1 Entry Information

National Certificate of Education [NCE]

#### 4.2 Recognition of Prior Learning [RPL]

Potential candidates holding at least 3 years of working experience in the relevant field may access this qualification through Recognition of Prior Learning (RPL) process.

#### 5. Award of Qualification Requirements

#### Compulsory

#### All the unit standards listed are required:

| Unit No.      | Unit Standard Title  | Level | Credit |
|---------------|--|-------|--------|
| me/07/0001/03 | Demonstrate knowledge of trade calculations and<br>units for mechanical engineering trades | 3     | 4      |
| me/07/0002/03 | Demonstrate knowledge of basic mechanics for mechanical engineering trades                 | 3     | 3      |
| me/04/0003/03 | Demonstrate knowledge of fasteners used in mechanical engineering                          | 3     | 2      |
| me/04/0004/03 | Demonstrate knowledge of safety on engineering worksites                                   | 3     | 1      |
| me/04/0005/03 | Shift loads in engineering installation,<br>maintenance, and fabrication work              | 3     | 3      |
| me/04/0006/03 | Draw and interpret engineering sketches under supervision                                  | 3     | 4      |
| me/04/0008/03 | Demonstrate basic knowledge of engineering metals  | 3     | 5      |
| me/07/0003/03 | Select, use, and care for simple measuring devices used in engineering                     | 3     | 3      |
| me/07/0004/03 | Select, use, and care for engineering dimensional measuring equipment                      | 3     | 4      |
| me/07/0005/03 | Select, use, and care for engineering marking-out equipment                                | 3     | 5      |

| Unit No.      | Unit Standard Title   | Level | Credit |
|---------------|---|-------|--------|
| me/07/0006/03 | Demonstrate basic engineering workshop skills<br>under close supervision            | 3     | 12     |
| me/07/0007/03 | Perform basic fabrication operations under supervision                              | 3     | 12     |
| me/02/0001/03 | Select, use and care for, engineering hand tools                                    | 3     | 3      |
| me/07/0008/03 | Select, use and maintain portable hand held<br>engineering power tools              | 3     | 3      |
| th/03/0022/03 | Read texts for practical purposes   | 3     | 4      |
| me/07/0009/03 | Develop fabrication patterns for simple three-<br>dimensional objects               | 3     | 8      |
| me/07/0010/03 | Lay out and mark off light fabrication shapes                                       | 3     | 7      |
| me/07/0011/03 | Cut, form and shape sheet metal   | 3     | 6      |
| me/03/0001/03 | Weld steel sections with the manual metal arc welding process in downhand positions | 3     | 4      |
| me/03/0002/03 | Join metals with the oxyacetylene welding process                                   | 3     | 6      |
| me/03/0003/03 | Join metals using torch brazing and soldering                                       | 3     | 6      |
| me/03/0004/03 | Join metals with the resistance welding process                                     | 3     | 6      |
| me/03/0007/03 | Cut metals using manual thermal processes   | 3     | 6      |
| me/03/0012/03 | Assemble work pieces in jigs (minor amendments include the use of manipulators)     | 3     | 3      |
|               | Total   |       | 120    |

#### 6. Purpose:

This qualification represents a set of foundation skills for sheet metal work.

Holders of this qualification have the following skills and knowledge relevant to the sheet metal work industry:

- health and safety;
- trade mathematics and mechanics;
- metals and other materials used in engineering;
- fasteners and assembly;
- sketching;
- measurement;
- engineering tools;
- machining or fabrication operations; and
- welding safety and procedures.