

# ***National Certificate in Mechanical Engineering Craft Practice*** ***– Level 3***

**level:** 3

**credit:** 110

**purpose:**

This qualification represents a set of foundation skills for mechanical engineering and related trades. The qualification may be used as the first stage of an apprenticeship or as the basis for pre-trade courses. It is particularly relevant for people wishing to pursue careers in general engineering, machining, toolmaking, fitting, engineering maintenance, engineering fabrication, and marine engineering.

Holders of this qualification have the following skills and knowledge relevant to the mechanical engineering 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.

## **2 regulations for the qualification**

2.1 entry information for programmed of education and training assessed against the unit standards in the qualification

Open.

2.2 recognition of prior learning

N/A.

2.3 summary of qualification requirements

This qualification will be awarded to people who have met all the requirements.

## Detailed Qualification Requirements

### Compulsory

The following standards are required

<b>ID</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>
me/04/0001/03	Demonstrate knowledge of trade calculations and units for mechanical engineering trades	3	4
me/04/0002/03	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, maintenance, and fabrication work	3	3
me/04/0006/03	Draw and interpret engineering sketches under supervision	3	4
me/04/0007/03	Construct engineering plane geometric shapes under supervision	3	4
me/04/0008/03	Demonstrate basic knowledge of engineering metals	3	5
me/04/0009/03	Demonstrate basic knowledge of engineering materials	3	3
me/04/0010/03	Select, use, and care for simple measuring devices used in engineering	3	3
me/04/0011/03	Select, use, and care for engineering dimensional measuring equipment	3	4
me/04/0012/03	Select, use, and care for engineering marking-out equipment	3	5
me/04/0013/03	Assemble mechanical components under supervision	3	4
me/04/0014/03	Demonstrate basic engineering workshop skills under close supervision	3	12
me/04/0015/03	Develop a simple product using engineering materials	3	10
me/04/0016/03	Perform basic mechanical engineering machining operations under supervision	3	12
me/04/0017/03	Perform basic fabrication operations under supervision	3	12
me/02/0001/03	Select, use and care for, engineering hand tools	3	3
me/02/0002/03	Select, use and maintain portable hand held engineering power tools	3	3
me/03/0008/03	Demonstrate and apply knowledge of safe welding procedures under supervision	3	3
hs/01/0006/02	Provide first aid	2	2
th/03/0021/03	Participate in groups and/or teams to gather ideas and information	3	4
th/03/0022/03	Read texts for practical purposes	3	4
	<b>Total</b>		<b>110</b>

**3 accreditation option N/A**

**4 certification**

**Please Note:** Providers must be accredited by the Mauritius Qualifications Authority.