

**FIELD            ENGINEERING AND TECHNOLOGY****Reinstatement and Rollover of expired and expiring *Mechanical Engineering* unit standards****Subfield      Mechanical Engineering**

<b>Domain</b>	<b>Id</b>
Applied Principles of Mechanical Engineering	11387-11391, 11394-11397, 14141
Engineering Core Skills	2824, 12299
Engineering Drawing and Design	<b>2437-2440</b>
Engineering Machining and Toolmaking	2710, 2711
Engineering - Materials	<b>4795, 4796, 4798, 4803</b>
Fluid Power	<b>2722-2724, 2734-2736, 2738</b>
Maintenance and Diagnostics in Mechanical Engineering	<b>2405</b>
Mechanical Assembly	2388, 2389
Mechanical Commissioning	2392, 2394
Mechanical Installation	2393
Metal Casting	2372
Refrigeration and Air Conditioning	3824, 3825, 3829, 3830, 3832-3836, 3838-3840, 3843-3845, 3848-3850, 3853
Welding	2670

Competenz has revised the expiry dates of the unit standards listed above. The standards that had **expired** have been reinstated as expiring with new expiry dates (in **bold** in the table above); and the standards that were expiring have been rolled over with new expiry dates.

**Date new versions published****June 2007****New expiry dates****December 2011 or 2012 – see tables below****Reason for the revision**

These standards had all been reviewed as Category C or D at different times over recent years, and they have now expired or are expiring.

Subsequent to the review of these standards, a number of qualifications in which they are listed, have been replaced or reviewed, or are in the process of being reviewed. Final dates of award for the old versions of these qualifications are 31 December 2011 or 2012.

Revision of the expiry dates is necessary in order to maintain credit worthiness of the old standards, allowing trainees to complete the qualifications being phased out.

**Main changes resulting from the revision**

The expiry dates of the standards have been updated.

**Impact on existing provider accreditations**

None.

## Impact on Accreditation and Moderation Action Plan (AMAP)

AMAP 0013 has been updated to reflect the new expiry dates.

### Impact on existing qualifications

None.

The following tables show the old and revised expiry dates.

Field            Engineering and Technology  
 Subfield        Mechanical Engineering  
 Domain         Applied Principles of Mechanical Engineering

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
11387	Apply principles of thermodynamics to mechanical engineering systems	6	25	31/12/2008	31/12/2012
11388	Select homogeneous components involving statically determinate force systems	4	10	31/12/2008	31/12/2012
11389	Produce an analysis of static and dynamic force systems	4	10	31/12/2008	31/12/2012
11390	Apply principles of strengths of materials to mechanical engineering systems	6	25	31/12/2008	31/12/2012
11391	Apply theory of machines to mechanical components and mechanisms	6	15	31/12/2008	31/12/2012
11394	Select and specify materials for mechanical engineering applications	6	15	31/12/2008	31/12/2012
11395	Apply principles of electronics relevant to mechanical engineering systems	5	10	31/12/2008	31/12/2012
11396	Apply electrical principles in mechanical engineering systems	5	10	31/12/2008	31/12/2012
11397	Select mechanical engineering manufacturing processes and equipment	5	20	31/12/2008	31/12/2012
14141	Describe and apply mechanical technology	4	12	31/12/2008	31/12/2012

Domain         Engineering Core Skills

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
2824	Demonstrate knowledge of, and apply, safe working practices on an engineering worksite	2	3	31/12/2008	31/12/2012
12299	Shift loads in the performance of machinery and equipment installation and maintenance	2	3	31/12/2008	31/12/2012

## Domain Engineering Drawing and Design

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
<b>2437</b>	Produce mechanical and fluid power drawings	4	20	31/12/2006	31/12/2012
<b>2438</b>	Produce fabrication drawings	4	20	31/12/2006	31/12/2012
<b>2439</b>	Produce heating, ventilation, refrigeration, and air conditioning drawings	4	20	31/12/2006	31/12/2012
<b>2440</b>	Undertake non critical design of engineering components and assemblies	5	15	31/12/2006	31/12/2012

## Domain Engineering Machining and Toolmaking

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
2710	Set automatic cam operated lathes	4	20	31/12/2008	31/12/2012
2711	Write Computer Numerical Controlled programmes for engineering machines	4	15	31/12/2008	31/12/2012

## Domain Engineering - Materials

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
<b>4795</b>	Distinguish the characteristics of engineering materials	1	2	31/12/2006	31/12/2012
<b>4796</b>	Distinguish the characteristics of engineering metals	2	3	31/12/2006	31/12/2012
<b>4798</b>	Identify and select engineering metals for specified applications	3	2	31/12/2006	31/12/2012
<b>4803</b>	Identify heat treatment of tool steels and surface heat treatment processes for engineering metals	5	7	31/12/2006	31/12/2012

## Domain Fluid Power

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
<b>2722</b>	Maintain a fluid power system	2	5	31/12/2005	31/12/2012
<b>2723</b>	Make a fluid power system safe	2	8	31/12/2005	31/12/2012
<b>2724</b>	Clean a fluid power system for service	2	4	31/12/2005	31/12/2012
<b>2734</b>	Diagnose pneumatic fluid power system faults	4	20	31/12/2005	31/12/2012
<b>2735</b>	Specify and design integrated hydraulic fluid power systems	5	20	31/12/2005	31/12/2012

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
<b>2736</b>	Specify and design integrated pneumatic fluid power systems	5	15	31/12/2005	31/12/2012
<b>2738</b>	Diagnose faults in and service specialist fluid power controllers	5	20	31/12/2005	31/12/2012

## Domain Maintenance and Diagnostics in Engineering

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
<b>2405</b>	Identify and replace bearings in machines and equipment	4	20	31/12/2005	31/12/2012

## Domain Mechanical Assembly

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
2388	Assemble and fit precision tooling and mechanical components	3	10	31/12/2010	31/12/2012
2389	Assemble and fit precision tooling and mechanical components under supervision	2	4	31/12/2010	31/12/2012

## Domain Mechanical Commissioning

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
2392	Commission single station machine	4	8	31/12/2010	31/12/2012
2394	Commission multi station machines and/or plant	5	15	31/12/2010	31/12/2012

## Domain Mechanical installation

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
2393	Install multi station machines and/or plant	5	20	31/12/2010	31/12/2012

## Domain Metal Casting

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
2372	Produce metal castings using pressure die casting machine	2	5	31/12/2008	31/12/2012

## Domain Refrigeration and Air Conditioning

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
3824	Design and develop refrigeration and air conditioning systems with technical supervision	3	35	31/12/2010	31/12/2011
3825	Design and develop residential and light commercial refrigeration and air conditioning systems	4	15	31/12/2010	31/12/2011
3829	Assemble and manufacture refrigeration and air conditioning system components with technical supervision	1	20	31/12/2010	31/12/2011
3830	Assemble and manufacture residential and light commercial refrigeration and a/c system components	1	10	31/12/2010	31/12/2011
3832	Assemble and manufacture industrial refrigeration system components	3	10	31/12/2010	31/12/2011
3833	Assemble and manufacture large central plant air conditioning system components	3	10	31/12/2010	31/12/2011
3834	Install refrigeration and air conditioning systems with technical supervision	1	30	31/12/2010	31/12/2011
3835	Install residential and light commercial refrigeration and air conditioning systems	2	12	31/12/2010	31/12/2011
3836	Install commercial and light industrial refrigeration and air conditioning systems	3	12	31/12/2010	31/12/2011
3838	Install large central plant air conditioning systems	4	12	31/12/2010	31/12/2011
3839	Commission refrigeration and air conditioning systems with technical supervision	3	20	31/12/2010	31/12/2011
3840	Commission residential and light commercial refrigeration and air conditioning systems	4	12	31/12/2010	31/12/2011
3843	Commission large central plant air conditioning systems	5	15	31/12/2010	31/12/2011
3844	Maintain refrigeration and air conditioning systems with technical supervision	2	15	31/12/2010	31/12/2011
3845	Maintain residential and light commercial refrigeration and air conditioning systems	3	12	31/12/2010	31/12/2011
3848	Maintain large central plant air conditioning systems	4	10	31/12/2010	31/12/2011

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
3849	Service refrigeration and air conditioning systems with technical supervision	3	20	31/12/2010	31/12/2011
3850	Service residential and light commercial refrigeration and air conditioning systems	3	15	31/12/2010	31/12/2011
3853	Service large central plant air conditioning systems	5	20	31/12/2010	31/12/2011

Domain      Welding

<b>Id</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Previous Expiry Date</b>	<b>New Expiry Date</b>
2670	Avoid welding hazards with safe work practices	2	1	31/12/2009	31/12/2012