

# Europass certificate supplement (\*)

(version August 2014)



#### 1. Title of the certificate (en)



# City & Guilds Level 4 Diploma in Mechanical Engineering (9209-01)

<sup>(1)</sup> In the original language

### 2. Translated title of the certificate (1)

<sup>(1)</sup> If applicable. This translation has no legal status.

#### 3. Profile of skills and competences

A typical holder of the certificate is able to:

- Explain the effects of loads and forces acting in or on various components
- Explain the effects of stress and strain on beams, shafts and other systems and how these are contained
- Explain the principles of electrical engineering required by mechanical engineers, including electrical machines and associated control methods
- Apply engineering science to support the analysis of problems in fluid flow and energy transfer systems
- Solve practical steady-state engineering problems
- Explain a range of mathematical operations and analysis techniques required to solve engineering problems, including algebraic methods, trigonometric, calculus, and complex analysis methods

#### and has successfully completed seven of the following areas:

- Quality assurance and control
- Human factors in the workplace
- Engineering planning and scheduling
- Statistical analysis for engineers
- Computer aided design for manufacture
- Maintenance of engineering systems and equipment
- Engineering design
- · Planning and implementing change within businesses
- Personal and professional development
- Managing information and knowledge
- Engineering procurement
- Principles of composite materials
- Principles of composites manufacture
- Developing business improvement plans
- Principles of mechanical component manufacture
- Materials engineering
- · Automated machining of materials
- Industrial robotics
- Statistical process control
- Metal fabrication technology
- Welding technology and practice
- Quality assurance and testing of welded joints

## 4. Range of occupations accessible to the holder of the certificate <sup>(1)</sup>

Senior Technician

Engineering Management

Note: the above are examples only, other occupations may also be accessible to holders of the certificate.

5. Official basis of the certificate	
Name and status of the body awarding the certificate	Name and status of the national/regional authority providing accreditation/recognition of the certificate
City & Guilds	, · · · · · · · · · · · · · · · · · · ·
1 Giltspur Street	The international engineering qualifications are a unique
London EC1A 9DD	set of qualifications designed by City & Guilds mainly for
United Kingdom	international use.
T +44 (0)20 7294 2800	
F +44 (0)20 7294 2400	They are subject to global quality assurance rules and
www.cityandquilds.com	regulations set by City & Guilds. These policies are based
	on the quality assurance practices which have been
City & Guilds was established in 1878 as a registered charity	approved by Qfqual.
(no. 312832) and received Royal Charter (RC117) in 1900.	
	The Level 4 Diploma in Mechanical Engineering has been
City & Guilds is accredited as an awarding body by the Office of	developed using the City & Guilds Level 4 Diploma in
the Qualifications and Examinations Regulator (Qfqual) and the	Mechanical Manufacturing Engineering (2875-04) as its
Scottish Qualifications Authority (SQA) to offer qualifications.	source. The 2875-04 qualification is accredited at level 4
······································	of the Qualifications and Credit Framework.
Level of the certificate (national or international)	Grading scale/Pass requirements
Level 4* – National Qualifications Framework of England, Wales and Northern Ireland (NQF)	Units that make up the qualification are graded 'Pass', 'Credit', 'Distinction' or 'Fail'.
*broad comparability	The everall qualification is not graded. A contificate will
bload comparability	The overall qualification is not graded. A certificate will only be awarded on successful completion of the required
	number of units.
	number of units.
Access to next level of education/training	International agreements
We consider the following options to be a relevant progression	
routes from this qualification:	
1	
Level 5 Diploma in Mechanical Engineering (9209-11)	
ILM qualifications	
University	
Employment.	
Legal basis	
Not applicable.	

## 6. Officially recognised ways of acquiring the certificate

This qualification can only be offered by an institution/provider ('centre') that has been approved by City & Guilds and therefore meets its quality requirements for staff and centre resources and is subject to regular checks.

The following assessment methods are used:

- Written tests set and marked by City & Guilds
- Practical assessments set by City & Guilds and marked by the centre
- Practical assessments set and marked by the centre

All assessment practice is quality assured by City & Guilds verifiers.

A typical learner will study for 1200 hours to achieve this qualification, but the duration of the training will vary depending on optional units chosen.

#### **Entry requirements**

City & Guilds exercises a policy of open access and does not set formal entry requirements for its qualifications. Centres are however required to ensure that learners are registered for a programme of study and examination at the appropriate level.

#### More information (including a description of the national qualifications system) available at: <u>www.naric.org.uk</u>. National reference point: <u>www.uknrp.org.uk</u>.

### (\*) Explanatory note

This document is designed to provide additional information about the specified certificate and does not have any legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications, Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates, and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers. More information available at: <a href="http://europass.cedefop.eu.int">http://europass.cedefop.eu.int</a>. © European Communities 2002