



# EAL Level 4 Diploma in **Aerospace and Aviation (Development Competence)**

## Qualification specification

### Overview

This qualification covers the specific skills, knowledge and behaviours for a range of aviation maintenance disciplines which have been developed in consultation with sector industry specialists and training providers to ensure that it meets the needs of industry, employers and apprentices and covers a range of apprenticeship standards developed across the aviation maintenance sector.

### Typical job roles

- Aircraft Maintenance Certifying Engineer (Fixed and Rotary Wing)

Qualification code:	603/5083/0
Level:	4
TQT:	Minimum 1933 hours
Minimum learning age:	16
Issue:	B

## Purpose of the qualification

### What is this qualification?

This qualification is a competency qualification which lies within the National Qualification Framework (NQF) and has been approved by the aviation maintenance sector employer group which is made up a range of employers, training providers and professional institutions. The qualification focuses on the skills, knowledge and behaviours required to achieve the development phase requirements of the relevant apprenticeship standards. This arrangement ensures that when the apprentice completes the qualification they will have gained knowledge and practical experience of some of the situations that they could face within the occupational sector in which it is being delivered.

### What does this qualification cover?

The qualification covers the specific skills, knowledge and behaviours of a range of aviation maintenance disciplines which have been developed in consultation with engineering industry specialists and training providers to ensure that it meets the needs of industry employers and learners.

The content and structure of the qualification has been developed to provide the appropriate level of skills, knowledge and behaviours required to be achieved and assessed to demonstrate full occupational competence in the development phase of the apprenticeship.

This qualification is a Level 4 Diploma and has **1760** Guided Learning Hours (GLH), and has a Total Qualification Time (TQT) of **1933** hours.

### Who is this qualification for?

- Apprentices working towards a relevant apprenticeship standard,
- Apprentices looking to advance to the development phase of a relevant apprenticeship standard.

## Who supports the qualification?

This qualification is:

- Regulated by Ofqual at Level 4,
- Supported by Semta,
- Supported by the aviation maintenance sector.

## What could this qualification lead to?

### Typical job roles include:

- Aircraft Maintenance Certifying Engineer (Fixed and Rotary Wing)

The qualification will provide progression onto other suitable and appropriate Level 4 and Level 5 engineering and manufacturing qualifications.

## Entry requirements

Apprentices must be at least 16 years old. There are no formal entry requirements for this qualification; however centres should ensure that the apprentice have the potential to achieve this qualification. Apprentices must have the minimum levels of literacy and numeracy to complete the learning outcomes and the external assessment.

Centres should make apprentices with particular requirements aware of the content of the qualification and they should be given every opportunity to successfully complete the qualification. EAL will consider any reasonable suggestions for, and from, those with disabilities that would help them to achieve the learning outcomes without compromising the standards required.

## How is the qualification achieved?

The qualification is achieved when all the necessary units have been completed. The centre will then be able to apply for the apprentice's certificate of achievement. The apprentice will also receive a certificate of unit credit, listing all the units they have achieved.

## What will be assessed?

This qualification is gained when all the performance, skills knowledge and behaviours have been successfully demonstrated across the assessment criteria for each unit selected.

The assessment criteria within the units of competence have been specifically developed to cover the skills, knowledge and behaviours for a wide range of activities relevant to a range of roles that are available within the aviation maintenance sector. The evidence produced for the units will, therefore, depend on the skills and knowledge required by the employer and as specified in the apprentice's training plan.

## Grading criteria

This qualification is not graded, apprentices can achieve a pass or be referred (competent/not yet competent).

To achieve a pass, apprentices must be able to demonstrate their performance, skills, knowledge and behaviours across all the mandatory and optional units.

## How will it be assessed?

**Performance evidence** must be a product of the apprentice's work, such as maintained engineering assemblies, sub-assemblies or components that have worked on, plans, charts, reports, standard operating procedures, documents produced as part of a work activity, records or photographs of the completed activity together with evidence of the way the apprentice carried out the activities, such as witness testimonies, assessor observations or authenticated apprentice reports of the activity undertaken.

**Knowledge and understanding** are key components of competent performance, but it is unlikely that performance evidence alone will provide enough evidence in this area. Where the apprentice's knowledge and understanding is not apparent from performance evidence, it must be assessed by other means and be supported by suitable evidence.

## Structure

This qualification can be achieved by the apprentice by completing the **mandatory** units **plus** the required number of **optional units**.

**Group A: Mandatory units** - all **four** mandatory units must be completed:

EAL Code	Unit title	GLH	Ofqual Code
NUEC4/001	Complying with statutory regulations and organisational safety requirements	13	F/617/7483
NUEC4/002	Using and interpreting engineering data and documentation	31	J/617/7484
NUEC4/003	Working efficiently and effectively in an aircraft maintenance environment	42	L/617/7485
NUEC4/004	Reinstating the work area on completion of activities	110	R/617/7486

**Group B: Optional units** - a minimum of **two** optional unit must be completed from the following:

EAL Code	Unit title	GLH	Ofqual Code
NUEC4/005	Lifting and trestling/shoring aircraft for maintenance/repair operations	84	H/617/7489
NUEC4/006	Levelling and weighing aircraft	84	T/617/7495
NUEC4/007	Towing, marshalling and parking aircraft	84	H/617/7508
NUEC4/008	Carrying out flight servicing and routine maintenance of aircraft	147	K/617/7509

**Group C: Optional units** - the apprentice must complete **six** of the following units:

EAL Code	Unit title	GLH	Ofqual Code
NUEC4/009	Maintaining and certifying aircraft air conditioning systems (ATA 21)	248	D/617/7510
NUEC4/010	Maintaining and certifying aircraft auto flight systems (ATA 22)	248	K/617/7512
NUEC4/011	Maintaining and certifying aircraft communication systems (ATA 23)	248	M/617/7513
NUEC4/012	Maintaining and certifying aircraft electrical power systems (ATA 24)	248	T/617/7514
NUEC4/013	Maintaining and certifying aircraft equipment and furnishings (ATA 25)	248	A/617/7515
NUEC4/014	Maintaining and certifying aircraft fire protection systems (ATA 26)	248	R/617/7522
NUEC4/015	Maintaining and certifying aircraft flight control systems (ATA 27)	248	M/617/7527
NUEC4/016	Maintaining and certifying aircraft fuel systems (ATA 28)	248	M/617/7530

## Structure

### Optional units - continued

EAL Code	Unit title	GLH	Ofqual Code
NUEC4/017	Maintaining and certifying aircraft hydraulic systems (ATA 29)	248	T/617/7609
NUEC4/018	Maintaining and certifying aircraft ice and rain protection systems (ATA 30)	248	K/617/7610
NUEC4/019	Maintaining and certifying aircraft indicating and recording systems (ATA 31)	248	M/617/7611
NUEC4/020	Maintaining and certifying aircraft landing gear (ATA 32)	248	A/617/7613
NUEC4/021	Maintaining and certifying aircraft lighting systems (ATA 33)	248	F/617/7614
NUEC4/022	Maintaining and certifying aircraft navigation systems (ATA 34 )	248	J/617/7615
NUEC4/023	Maintaining and certifying aircraft oxygen systems (ATA 35)	248	L/617/7616
NUEC4/024	Maintaining and certifying aircraft pneumatic systems (ATA 36)	248	R/617/7617
NUEC4/025	Maintaining and certifying aircraft vacuum systems (ATA 37)	248	Y/617/7618
NUEC4/026	Maintaining and certifying aircraft water and waste systems (ATA 38)	248	R/617/7620
NUEC4/027	Maintaining and certifying aircraft cabin systems (ATA 44)	248	Y/617/7621
NUEC4/028	Maintaining and certifying aircraft airborne auxiliary power systems (ATA 49)	248	D/617/7622
NUEC4/029	Maintaining and certifying aircraft cargo and accessory compartments (ATA 50)	210	H/617/7623
NUEC4/030	Maintaining and certifying aircraft doors (ATA 52)	248	K/617/7624
NUEC4/031	Maintaining and certifying aircraft fuselage, nacelles and pylons (ATA 53 & 54)	240	M/617/7625
NUEC4/032	Maintaining and certifying aircraft stabilisers (ATA 55)	250	T/617/7626
NUEC4/033	Maintaining and certifying aircraft windows (ATA 56)	250	A/617/7627
NUEC4/034	Maintaining and certifying aircraft wings (ATA 57)	248	F/617/7628
NUEC4/035	Maintaining and certifying aircraft propeller/propulsor systems (ATA 61)	248	J/617/7629
NUEC4/036	Maintaining and certifying rotocraft rotor systems (ATA 62 & 64)	248	A/617/7630
NUEC4/037	Maintaining and certifying rotocraft rotor drives systems (ATA 63 & 65)	248	F/617/7631
NUEC4/038	Maintaining and certifying rotocraft rotor blade and tail pylon folding systems (ATA 66)	248	J/617/7632

## Structure

### Optional units - continued

EAL Code	Unit title	GLH	Ofqual Code
NUEC4/039	Maintaining and certifying rotocraft flight control systems (ATA 67)	248	L/617/7633
NUEC4/040	Maintaining and certifying aircraft power plant (ATA 71)	248	R/617/7634
NUEC4/041	Maintaining and certifying aircraft turbine engines (ATA 72)	248	Y/617/7635
NUEC4/042	Maintaining and certifying aircraft reciprocating engines (ATA 72)	248	D/617/7636
NUEC4/043	Maintaining and certifying aircraft engine fuel and control systems (ATA 73)	210	H/617/7637
NUEC4/044	Maintaining and certifying aircraft ignition systems (ATA 74)	240	K/617/7638
NUEC4/045	Maintaining and certifying aircraft bleed air systems (ATA 75)	250	M/617/7639
NUEC4/046	Maintaining and certifying aircraft engine control systems (ATA 76)	248	H/617/7640
NUEC4/047	Maintaining and certifying aircraft engine indicating systems (ATA 77)	248	K/617/7641
NUEC4/048	Maintaining and certifying aircraft engine exhaust systems (ATA 78)	250	T/617/7643
NUEC4/049	Maintaining and certifying aircraft lubricating oil systems (ATA 79)	250	A/617/7644
NUEC4/050	Maintaining engine and certifying aircraft starting systems (ATA 80)	250	J/617/7646
NUEC4/051	Maintaining and certifying aircraft reciprocating engine turbo-supercharging systems (ATA 81)	250	L/617/7647
NUEC4/052	Maintaining and certifying aircraft engine water injection systems (ATA 82)	250	R/617/7648
NUEC4/053	Maintaining and certifying aircraft radar systems (ATA 34)	248	Y/617/7649
NUEC4/054	Leading the oversight of aircraft maintenance\activities	248	L/617/7650

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