QUALIFICATION SPECIFICATION

g gateway
qualifications

CAD 3D for Garden Designers (Level 3)

This qualification specification covers the following qualification:

Qualification Number	Qualification Title
601/8976/9	Gateway Qualifications Level 3 CAD 3D for Garden Designers

Version and date	Change detail	Section/Page Reference
1.2 Dec (2022)	Funding section updated, address removed and back cover changed	Page 8 &18

About this qualification specification

This qualification specification is intended for tutors, assessors, Internal Quality Assurers, Centre Quality Managers and other staff within Gateway Qualifications recognised centres and/or prospective centres.

It sets out what is required of the learner in order to achieve the qualification. It also contains information specific to managing and delivering the qualification including specific quality assurance requirements.

The guide should be read in conjunction with the Gateway Qualifications Centre Handbook and other publications available on the website which contain more detailed guidance on assessment and verification practice.

In order to offer this qualification you must be a Gateway Qualifications recognised centre.

If your centre is not yet recognised, please contact our Development Team to discuss becoming a Gateway Qualifications Recognised Centre:

Telephone: 01206 911211
Email: enquiries@gatewayqualifications.org.uk
Website: www.gatewayqualifications.org.uk/recognition

Contents

1. Qualification Information

1.1. About the qualification

The qualification has been approved by Ofqual, the regulator of qualifications, examinations and assessments in England.
The qualification has been developed to enable learners to develop the understanding and skills to use CAD 3D in their garden design work

1.2. Objective

The objective of the Gateway Qualifications Level 3 CAD 3D for Garden Designers is to prepare for further learning or training and/or develop knowledge and/or skills in CAD 3D in the context of Garden Design.

1.3. Key Facts

Qualification Title	Total Qualification Time	Guided Learning	Credit Value
Gateway Qualifications Level 3 CAD 3D for Garden Designers	60	48	6

Total Qualification Time is the number of notional hours which represents an estimate of the total amount of time that could be reasonably expected to be required for a Learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of the qualification.

Total Qualification Time is comprised of the following two elements:

- the number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and
- an estimate of the number of hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place by – but, unlike Guided Learning, not under the Immediate Guidance or Supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

1.4. Achievement methodology

The qualification will be awarded to learners who successfully achieve an approved combination of units through a Portfolio of Evidence that has been successfully verified and monitored through Gateway Qualifications' Quality Assurance process. Achievement is therefore determined by successful completion of unit assessment with no further requirement for additional/summative assessment.

1.5. Geographical Coverage

This qualification has been approved by Ofqual to be offered in England.

1.6. Progression Opportunities

There are two main progression opportunities for learners who successfully complete this qualification:

1. To work as a professional garden designer using 3D CAD to develop client portfolios.
2. To progress onto further learning such as a FdSC in Garden Design and Plantmanship.

1.7. Relationship with other frameworks

There is no direct relationship of this qualification to other frameworks such as National Occupational Standards (NOS).

The qualification has been developed in consultation with a leading land-based further education college.

1.8. Funding

For information on potential sources of funding in England please visit the Education and Skills Funding Agency:

https://www.gov.uk/government/organisations/education-and-skills-funding-agency

https://www.gov.uk/government/collections/qualifications-approved-for-public-funding

https://hub.fasst.org.uk/Pages/default.aspx

1.9. Equality, Diversity and Inclusion

It is Gateway Qualifications' aim that there shall be equal opportunities within this organisation and in all the services it provides and within its recognised centres and via the services they provide and so meet the organisation's legal responsibilities to prevent discrimination.

In particular it is the organisation's intention that there should be no discrimination on the grounds of a protected characteristic including age, disability, gender assignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex, sexual orientation. It is acknowledged that this is not an exhaustive list.

2. Learner Entry Requirements

2.1. Age

The approved age range for these qualifications is 16+.

2.2. Prior Qualifications or Units

There is no requirement for learners to have achieved prior qualifications or units prior to undertaking this/these qualifications.

2.3. Prior Skills/Knowledge/Understanding

There is no requirement for learners to have prior skills, knowledge or understanding although learners may have completed CAD units at level 2, have an accompanying understanding of garden design and good IT skills.

2.4. Restrictions

There are no restrictions to entry.

2.5. Access to qualifications for learners with disabilities or specific needs

Gateway Qualifications and recognised centres have a responsibility to ensure that the process of assessment is robust and fair and allows the learner to show what they know and can do without compromising the assessment criteria.

Gateway Qualification has a duty to permit a reasonable adjustment where an assessment arrangement would put a disabled person at a substantial disadvantage in comparison to someone who is not disabled.

The following adaptations are examples of what may be considered for the purposes of facilitating access, as long as they do not impact on any competence standards being tested:

- adapting assessment materials;
- adaptation of the physical environment for access purposes;
- adaptation to equipment;
- assessment material in an enlarged format or Braille;
- assessment material on coloured paper or in audio format;
- British Sign Language (BSL);
- changing or adapting the assessment method;
- changing usual assessment arrangements;
- extra time, e.g. assignment extensions;
- language modified assessment material;
- practical assistant;
- prompter;
- providing assistance during assessment;

- reader;
- scribe;
- transcript;
- use of assistive software;
- using assistive technology;
- use of CCTV, coloured overlays, low vision aids;
- use of a different assessment location;
- use of ICT/responses using electronic devices.

It is important to note that not all of the adjustments (as above) will be reasonable, permissible or practical in particular situations. The learner may not need, nor be allowed the same adjustment for all assessments.

Learners should be fully involved in any decisions about adjustments/adaptations. This will ensure that individual needs can be met, whilst still bearing in mind the specified assessment criteria for a particular qualification.

A reasonable adjustment for a particular learner may be unique to that individual and may not be included in the list of available access arrangements specified above.

Special Considerations

Requests for special consideration should be submitted as soon as possible. Please refer to the Reasonable Adjustments and Special Consideration Policy.

2.6. Additional Requirements/Guidance

There are no additional rules or guidance regarding learner entry requirements.

2.7. Recruiting Learners with Integrity

It is vital that centres recruit with integrity with regard to qualifications. Centres must ensure that learners have the correct information and advice on their selected qualification(s) and that the qualification(s) will meet their needs.
The recruitment process must include the centre assessing each potential learner and making justifiable and professional judgements about the learner's potential to successfully complete the assessment and achieve the qualification. Such an assessment must identify, where appropriate, the support that will be made available to the learner to facilitate access to the qualification.

3. Achieving the Qualification

3.1. Qualification Structure (Rules of Combination and Unit List)

The knowledge, skills and understanding that will be assessed as part of the qualification are set out within the unit specifications. These include the learning outcomes and associated assessment criteria. These are detailed below.

For information on Recognition of Prior Learning please see section 3.2.

Gateway Qualifications Level 3 CAD 3D for Garden Designers

Learners much achieve two mandatory units.

Unit Reference Number	Unit Title	Level	Guided Learning	Credit Value
K/508/4494	Garden Design: Creating and Manipulating 3D Objects and Layout Plans using Computer-Aided Design	Level 3	24	3
M/508/4495	Garden Design: Creating the full 3D Garden Model using CAD.	Level 3	24	3

3.2. Recognition of Prior Learning

Recognition of Prior Learning (RPL) provides learners and Centres with an alternative assessment method by which a learner's previous achievements can meet the assessment requirements for a unit/qualification through the knowledge, understanding or skills that they already possess and so, do not need to develop these through a course of learning.

It enables the recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable to contribute to a unit, units or a whole qualification according to the RPL criteria for a given qualification.

The process of Recognition for Prior Learning is not applicable to this qualification.

3.3. Links to other qualifications

The qualification builds on related qualifications at Level 2 such as the Gateway Qualifications Level 2 Certificate in Garden Design.

4. Assessment and Quality Assurance

The following are in addition to the standard assessment and quality assurance requirements set out in the Gateway Qualifications Centre Handbook.

4.1.　Method of Assessment

The method of assessment for the qualification is through a portfolio of evidence.

4.2.　Assessment Materials

There are no specific assessment materials provided for this qualification.

4.3.　Qualification-Specific Centre Requirements

Centres must ensure that they have the appropriate resources in place when delivering performance units from vocational areas.

4.4.　Qualification-Specific Tutor/Assessor Requirements

Tutor/Assessors must be fully qualified and experienced in the subject area in which they are delivering, details of which must be provided to Gateway Qualifications as part of the Qualification Approval application.

4.5.　Qualification-Specific Quality Assurance Requirements

There are no additional internal/external quality assurance requirements for this/these qualification/s.

4.6.　Additional Requirements/Guidance

There are no additional requirements that Learners must satisfy in order for assessment to be undertaken and the unit/qualification to be awarded.

5. What to do next

For existing centres please contact your named Development Manager or Development Officer.

For organisations, not yet registered as Gateway Qualifications centre please contact:

Tel: 01206 911211

Email: enquiries@gatewayqualifications.org.uk

6. Gateway Qualifications

Gateway Qualifications, a not for profit registered charity, is an Awarding Organisation based in Colchester.

We work with learning providers and industry experts to design and develop qualifications that benefit the learner and the employer.

We support flexible, responsive and quality assured learning opportunities whether it's in the classroom, at work, in the community or through distance learning.

We are recognised by Ofqual, to design, develop and submit qualifications to the Regulated Qualifications Framework (RQF).

7. Appendices

7.1. Units Details

Garden Design: Creating and Manipulating 3D Objects and Layout Plans Using Computer-Aided Design

Unit Reference Number: K/508/4494

Level: Level 3

Guided Learning Hours: 24

Credit Value: 3

Unit Review Date: 31/05/2020

Sector Subject Area: 3.2 Horticulture and Forestry

Assessment Guidance: Portfolio of Evidence

Learning Outcomes	Assessment Criteria
The learner will:	**The learner can:**
1 Be able to create, reshape and combine 3D objects using the 3D modelling sets in Computer Aided Design (CAD).	1.1 Produce at least seven different complex 3D geometric objects including cubes, cones, hemispheres and complex polygons. 1.2 Reshape these objects using all the object handles and 3D modelling tools. 1.3 Produce combined 3D objects using three or more combining tools.
2 Be able to produce 3D objects to given measurements using CAD.	2.1 Produce complex 3D objects to given measurements. 2.2 Create hybrid symbols including for hardscape
3 Be able to edit 3D objects using CAD.	3.1 Perform at least four editing techniques on 3D objects.
4. Be able to apply Renderworks to the model.	4.1 Create 3D models with textures and applied colour using Renderworks.
5. Be able to produce a 3D layout plan for a garden using an existing site survey plan.	5.1 Extend a 2D site survey plan into a 3D layout plan 5.2 Create a drawing clearly differentiated into layers and classes 5.3 Manage a file in such a way that explains clearly layers and classes. 5.4 Create a series of saved views of the model.

Creating the Full 3D Garden Model Using CAD

Unit Reference Number:	M/508/4495
Level:	Level 3
Guided Learning Hours:	24
Credit Value:	3
Unit Review Date:	31/05/2020
Sector Subject Area:	3.2 Horticulture and Forestry
Assessment Guidance:	Portfolio of Evidence

Learning Outcomes	Assessment Criteria
The learner will:	**The learner can:**
1 Be able to create a new 3D hybrid symbol.	1.1 Produce at least three new hybrid symbols accessible through the resource browser.
2 Be able to produce 3D planting symbols, a planting plan and associated planting list.	2.1 Draw a planting plan including at least five different symbols some of which are repeated at least three times. 2.2 Produce a planting list linked to the planting plan which includes all the plants.
3 Be able to use the site modelling tool to create and modify a site model.	3.1 Use the site modelling tool to create a site model with varying levels. 3.2 Modify the site model using the site modelling tool.
4 Be able to use the Heliodon lighting tool to produce 3D models.	4.1 Use the Heliodon lighting tool to produce 3D models at differing times of the day with saved and walk-through views.
5 Be able to create camera views and walk-throughs of the model space.	5.1 Create a series of camera views of the model space. 5.2 Create a sequence of walk-throughs of the model space. 5.3 Create an animated short of the walk-through of the model space.