

# Next Generation Higher National Unit Specification

## Planting Design for Sustainable Landscapes (SCQF level 8)

**Unit code:** J896 48  
**SCQF level:** 8 (16 SCQF credit points)  
**Valid from:** session 2024 to 2025

### **Prototype unit specification for use in pilot delivery only (version 1.0) August 2024**

This unit specification provides detailed information about the unit to ensure consistent and transparent assessment year on year.

This unit specification is for teachers and lecturers and contains all the mandatory information required to deliver and assess the unit.

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## **Unit purpose**

This unit introduces learners to a range of ecological theories and ideas behind the latest developments in landscape design. These range from herbaceous planting design to green infrastructure interventions such as sustainable drainage systems (SUDS), green walls and green roofs.

It is suitable for learners who want a strong foundation in the defining principles and practices of the 'ecological turn' in the contemporary landscape design industry.

Before starting the unit, learners would benefit from having a foundation knowledge of garden design, ideally having completed units from the Higher National Certificate (HNC) Horticulture, on which this unit expands.

On completing the unit and on achieving the Higher National Diploma (HND), learners may be able to progress to degree programmes in Horticulture. Alternatively, they may wish to apply directly to the horticulture industry or related work placements.

## Unit outcomes

Learners who complete this unit can:

- 1 discuss the principles and technologies of sustainable planting design
- 2 produce ecologically informed planting schemes

## Evidence requirements

### Outcome 1

For a minimum of three, discuss the principles and technologies of sustainable planting design, evidencing that they can:

- ◆ describe the purpose of nature-based solutions used in the landscape design industry
- ◆ explain how a range of nature-based solutions are delivered in practice

They could evidence this using a short film, podcast, or written report; the choice of media at the discretion of the centre.

### Outcome 2

Produce ecologically informed planting schemes, evidencing that they can:

- ◆ analyse a planting scheme that demonstrates ecological sustainability
- ◆ produce ecologically informed planting schemes for two contrasting sites
- ◆ produce a specification of plants for each of the planting schemes, including the integration of plant function and aesthetics

## Knowledge and skills

The following table shows the knowledge and skills covered by the unit outcomes:

Knowledge	Skills
<p><b>Outcome 1</b>                      Learners should understand:</p> <ul style="list-style-type: none"> <li>◆ historical developments such as habitat fragmentation and decline due to, for example:                             <ul style="list-style-type: none"> <li>— pressures from urban development</li> <li>— demands of sustainability goals</li> <li>— biodiversity action plans</li> <li>— recognition of ecosystem services</li> </ul> </li> <li>◆ ecological theories and how they can be implemented in planting design, such as:                             <ul style="list-style-type: none"> <li>— Philip Grime’s ‘Plant Life Strategies’</li> <li>— habitat stereotypes,</li> <li>— phytosociology</li> <li>— the cues-to-care framework</li> <li>— vertical layers or the niche concept</li> </ul> </li> <li>◆ the range and purpose of current dominant green infrastructure technologies</li> </ul>	<p><b>Outcome 1</b>                      Learners can:</p> <ul style="list-style-type: none"> <li>◆ apply library research skills.</li> <li>◆ demonstrate clarity and accuracy of thought and expression</li> <li>◆ sustain attention on a complex task</li> <li>◆ construct and articulate a compelling and accurate account</li> <li>◆ technically examine products and technologies</li> <li>◆ apply critical thinking.</li> <li>◆ develop engaging and creative methods of communication</li> </ul>

Knowledge	Skills
<p><b>Outcome 2</b>                      Learners should understand:</p> <ul style="list-style-type: none"> <li>◆ Ecological theories such as Philip Grime’s ‘Plant Life Strategies’, Habitat Stereotypes, Phytosociology, Cues to Care, Vertical Layers/The Niche concept, and how these can be implemented in planting design.</li> <li>◆ how to interpret a designed landscape in terms of ecological process</li> <li>◆ how to embed ecological principles into a planting design</li> <li>◆ the function of chosen plants in a landscape</li> <li>◆ how to create a planting design</li> <li>◆ how to communicate a planting design including the necessary level of detail required by industry</li> </ul>	<p><b>Outcome 2</b>                      Learners can:</p> <ul style="list-style-type: none"> <li>◆ interpret a designed landscape in terms of ecological processes</li> <li>◆ create ecologically informed planting designs for contrasting sites</li> <li>◆ combine function with aesthetics when specifying plants for a design</li> <li>◆ clearly express complex technical planting design intentions</li> </ul>

## **Meta-skills**

Throughout the unit, learners develop meta-skills to enhance their employability in the landscape design sector.

### **Self-management**

This meta-skill includes:

- ◆ time keeping and punctuality in structuring work flows and organising schedules
- ◆ rising to challenges
- ◆ growing in personal belief and self-confidence

### **Social intelligence**

This meta-skill includes:

- ◆ showing verbal, visual and written communication skills
- ◆ team working
- ◆ following and participating with consideration for others in complex, fast-moving discussion and debates
- ◆ being open to diverse positions and views
- ◆ developing resilience to anxiety and stress
- ◆ expanding social horizons

### **Innovation**

This meta-skill includes:

- ◆ thinking critically and creatively
- ◆ using the 'negative capability' approach and imagination to come up with alternative solutions to problems

## **Delivery of unit**

We recommend that you take a flexible approach to delivering this unit, using a combination of classroom sessions for lectures, studio sessions for crits and presentations, and glasshouse sessions for practical activities. Site visits may be useful where possible.

The notional design length for the unit is XX hours. However, the amount of time you allocate to each outcome is at your discretion.

## **Additional guidance**

The guidance in this section is not mandatory.

You should ensure learners can spend a generous amount of time in studio sessions, where you can observe their work and give feedback. This will help them to work in an ecologically informed manner. Learners should also regularly expose their work to other people in their class in these studio sessions.

It is not sufficient to lecture only and expect the learners to work independently without ongoing feedback on their work. The skill of producing working planting plans takes practice with ample supervision. This serves to create an atmosphere of mutual support, encouragement and inspiration among the learners. You should make these sessions enjoyable and fun as well as informative. We emphasise this here, because learners without an arts background often view the studio sessions as optional. They are not optional. Much of design learning happens in the 'doing' of design, especially when supervised.

Glasshouse or garden sessions are a crucial means of exploring plant physiology and plant growth patterns in close detail. You can carry out planting design workshops where learners can express colour, texture and form theory by constructing small compositions in medium-sized containers. These sessions can be very effective at reinforcing the theory, before learners do planting designs on paper.

You should critically explore and examine current green infrastructure technologies used in industry, such as green walls, green roofs, street trees. This could be a short film, podcast or written report.

## **Equality and inclusion**

This unit is designed to be as fair and as accessible as possible with no unnecessary barriers to learning or assessment.

You should take into account the needs of individual learners when planning learning experiences, selecting assessment methods or considering alternative evidence.

Guidance on assessment arrangements for disabled learners and/or those with additional support needs is available on the assessment arrangements web page:

[www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).



## Information for learners

### Planting Design for Sustainable Landscapes (SCQF level 8)

This information explains:

- ◆ what the unit is about
- ◆ what you should know or be able to do before you start
- ◆ what you need to do during the unit
- ◆ opportunities for further learning and employment

### Unit information

This unit gives you the opportunity to develop the knowledge and skills to interpret the function and association of plants and technologies used in ecologically designed landscapes, and to produce ecologically informed planting designs. You learn about ecological theories and ideas behind the latest developments in landscape design, and you have the opportunity to put different ideas into practice.

In Outcome 1, you learn about the historical developments that have brought us to the point where ecological design is both necessary and possible.

In Outcome 2, you apply ecological theories to analysing and creating planting designs.

Throughout the unit, you have the opportunity to develop meta-skills covering self-management, social intelligence and innovation.

You can be assessed in a variety of ways, but these always include both written and design work.

On completing the unit and on achieving the Higher National Diploma (HND), you can progress to a BSc in Horticulture. Alternatively, you may wish to apply directly to the horticulture industry or related work placements.

# Administrative information

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**Superclass:** SE

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## History of changes

Version	Description of change	Date

Note: please check [SQA's website](#) to ensure you are using the most up-to-date version of this document.