Biodiversity, Ecology and Horticulture touches on so many aspects of our day-to-day lives, from the food we eat, to the flowers we grow, to the parks and sports grounds we enjoy for recreation. *TU Dublin’s Biodiversity, Ecology and Horticulture studies based at the School of Culinary Arts and Food Technology* have recently developed a series of part-time and full-time programmes to meet the current challenges. Our hands-on teaching approach offers you opportunities to develop skills through real-life practical projects engaging with real life problem solving, while specializing in areas that interest you most. Details below;

  

# **TU Dublin Honours Degree:** BSc (Hons) in Horticulture.

**TU Code:** TU884 / TU884P.

**Duration:** 1 Year full time (TU884), 2 Years part time (TU884P).

**Full Details:** TU884 (Full-time) [www.tudublin.ie/study/undergraduate/courses/horticulture-tu884/](http://www.tudublin.ie/study/undergraduate/courses/horticulture-tu884/)

**TU884P (Part-time)** [https://www.tudublin.ie/study/part-time/courses/horticulture-tu884p-/](https://eur05.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.tudublin.ie%2Fstudy%2Fpart-time%2Fcourses%2Fhorticulture-tu884p-%2F&data=05%7C02%7Cjames.p.murphy%40TUDublin.ie%7C16d3097ef37d4dce5ba508dce2b8418c%7C766317cbe9484e5f8cecdabc8e2fd5da%7C0%7C0%7C638634528330121771%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=tQKiv8wu0vLU1uczlwradqtPD8gLIbNKUxm05%2Foy8Cc%3D&reserved=0)

**Apply now / Contact:** School office: scaft@tudublin.ie Programme Chair: Rachel.freeman@tudublin.ie

# **TU Dublin Special Purpose Award:** Plant Identification and Management.

## Application Details

• **Closing date for applications:** 7th Jan 2025 / **Teaching commences** Week starting Jan 27th Jan 2025.

## • Programme fee: €1,200

## Programme Details

* **TU Code:** TU5159 **/ Level:** NFQ Level 6 / **Location:** Blanchardstown Campus
* **Award:** Special Purpose Certificate in Science in Plant Identification and Management (TU Dublin)
* **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
* **Contacts:** email scaft@tudublin.ie ciarnad.ryan@tudublin.ie

## Overview

Industry leaders in nursery, landscape and civic horticulture clearly identified that a major knowledge gap exists with plant identification and plant care within these sectors. The modules of *Plant Identification and Classification and Plant Use and Management* address these fundamental gaps in gardening skills and horticultural knowledge.

## Minimum Entry Requirements

LC Min grade (Maths 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

**Programme Content (2 modules)**

Plant Identification and Classification (HTSC H1013). / Plant Identification – Use and Management (HTSC H1025).

## Schedule-Duration

This programme is offered **(TWICE ANNUALLY)** and it runs over 24 weeks.

* **Starting:** Jan - May 2025, Tues 10 – 12 noon, plus (3 in-person sessions in H. Complex) **and** Sep – Dec 2025, Tues 10-12 noon, plus (3 in-person sessions in H. Complex).
* **Starting:** Sep – Dec 2025, Tues 10-12 noon, plus (3 in-person sessions in H. Complex) **and** Jan- May 2026, Tues 10 – 12 noon, plus (3 in-person sessions in H. Complex).

**TU Dublin Special Purpose Award:** Sustainable Horticulture.

## Application Details

• **Closing date for applications:** 7th Jan 2025 / **Teaching commences:** Week starting Jan 27th 2025.

## • Programme fee: €2,400

## Module Details

* **TU Code: TU5160 / Level:** NFQ Level 7 / **Location:** Blanchardstown Campus
* **Award:** Special Purpose Certificate in Science in Sustainable Horticulture (TU Dublin)
* **Course type:** Undergraduate /  **Mode of Study:** Part time / **Method of Delivery:** Blended
* **Contacts:** email scaft@tudublin.ie Rachel.freeman@tudublin.ie

## Overview

The interest in biodiversity, ecology and sustainability has expanded hugely in recent years, this programme addresses the fundamental requirements of companies who expect horticulture practitioners to understand the current issues around biodiversity, carbon use and climate change and landscape firms need to evolve their sustainable systems towards presenting their environmental credentials.

## Minimum Entry Requirements

LC Min grade (Maths 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

## Course Content (4 Modules)

Ecology and Biodiversity (HTSC H2028) / Trees and Woodlands (HTSC H3018).

Organic and Sustainable Horticulture (HTSC H3021) / Environmental Management (HTSC H4027).

**This programme is offered (TWICE ANNUALLY) and runs over two semesters for 24 weeks.**

* **Starting**: Jan- May, Monday 10-12 noon, plus 3 in-person sessions at (H. Complex); Fri 10-12 noon, plus 3 in-person sessions at (H. Complex) **and** Sep– Dec, Wed 11-3pm (H. Complex) ; Thur 10-12 noon, plus 3 in-person sessions at (H. Complex).
* **Starting:** Sep – Dec, Wed 11-3pm (H. Complex) ; Thur 10-12 noon, plus 3 in-person sessions at (H. Complex) **and** January- May, Mon 10-12 noon, plus 3 in-person sessions at (H. Complex); Fri 10-12 noon, plus 3 in-person sessions at (H. Complex).

# **TU Dublin- Single Module Certificates**

## Plant Identification and Classification (HTSC H1013).

### Application Details

• **Closing date for applications:** 2nd Sep 2025 / **Teaching commences** Week starting **Sep** 15th 2025.

### • Module fee: €600

###  Module Details

* **TU Code:** BN\_EHORT\_SS (BN995) / **Level:** NFQ Level 6 / **Location:** Blanchardstown Campus
* **Award:** Certificate in Plant Identification and Classification (TU Dublin)
* **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
* **Contact:** email ciarnad.ryan@tudublin.ie

### Overview

The student will acquire knowledge of a wide a range of plants, naming systems and the taxonomy necessary to carry out confident plant identification.

### Minimum Entry Requirements

LC Min grade (Maths 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

### Course Content

* Plant taxonomy, and the binomial system.
* Botanical Latin and its relationship to plants.
* Systems for plant identification.
* Plant hunters and the emergence of the designed landscape.
* The landscape use for autumn foliage and winter interest.

### Schedule-Duration

This module runs for 12 weeks in Semester 1.

* Semester 1: September – December 2025, Tuesdays 10 – 12 noon, plus 3 in-person sessions at H. Complex.

## Plant Identification – Use and Management (HTSC H1025).

### Application Details

* **Closing date for applications:** 7th Jan 2025
* **Teaching commences: Week starting** January 27th Jan 2025
* **Module fee:** €600

### Module Details

* **TU Code:** BN\_EHORT\_SS (BN995) / **Level:** NFQ Level 6 / **Location:** Blanchardstown Campus
* **Award:** Certificate in Plant Identification-Use and Management (TU Dublin)
* **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
* **Contact:** email Rachel.freeman@tudublin.ie

### Overview

This module builds on the Plant Identification and Classification module. Landscape sites and their specific attributes are explored, students will develop the appropriate plant selection skills and maintenance systems to establish their plant choices successfully.

### Minimum Entry Requirements

LC Min grade (Math’s 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

### Course Content

* Appropriate plant selection for a range of sites and locations.
* Growing requirements of plants.
* Non-native or exotic plants usage in Ireland.
* Causes and symptoms of non-pathogenic plant problems, reduction and elimination.
* Plant identification systems.
* Spring and Summer flowering trees and shrubs, spring bulbs, alpines and herbaceous plants.

### Schedule

This module runs for 12 weeks in Semester 2.

* Semester 2: Jan- May 2025, Tues 10 – 12 noon, plus 3 in-person sessions at H. Complex

## Ecology and Biodiversity (HTSC H2028).

### Application Details

• **Closing date for applications:** 2nd Sep 2025 / **Teaching commences** Week starting 15th Sep 2025

### • Module fee: €600

###  Module Details

* Overview **TU Code:** BN\_EHORT\_SS (BN995) / **Level:** NFQ Level 6 / **Location:** Blanchardstown Campus
* **Award:** Certificate in Ecology and Biodiversity (TU Dublin)
* **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
* **Contact:** email ciarnad.ryan@tudublin.ie

This module explores the principles and practices of ecology, biodiversity, environmental protection and the ecological impacts of climate change and sustainable strategies for mitigation and adaptation.

### Minimum Entry Requirements

LC Min grade (Math’s 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

### Course Content

* Principles of ecology, biodiversity and its relevance to environmental sustainability.
* Climate change and the impact of Irish conservation measures.
* Ecological value of habitats, developing a biodiversity index.
* Environmental protection measures including the National Biodiversity Plan.
* Carbon, nitrogen and other cycles in ecology and the effects of their disruption.
* Special Areas of Conservation (SAC) in Ireland, local authority development plans impacts.

### Schedule

This module runs for 12 weeks in Semester 1.

* Semester 1: Sep – Dec 2025, Thursday 10 – 12 noon, plus 3 in-person sessions in H. Complex.

## Trees and Woodlands (HTSC H3018).

### Application Details

* **Closing date for applications:** 3rd Jan 2025 / **Teaching commences:** Week starting 27th Jan 2025
* **Module fee:** €600

### Module Details

* **TU Code:** BN\_EHORT\_SS (BN995) / **Level:** NFQ Level 7 / **Location:** Blanchardstown Campus
* **Award:** Certificate in Trees and Woodlands (TU Dublin)
* **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
* **Contact:** email Rachel.freeman@tudublin.ie

### Overview

This module introduces the learner to the role and importance of trees and woodlands in urban and rural environments. The successful learner will be able to identify, appraise, protect and maintain trees.

### Minimum Entry Requirements

LC Min grade (Math’s 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

### Course Content

* Identification of tree, shrub species and cultivars, growing in parks, urban areas and woodlands.
* Principles and techniques for pruning trees and shrubs.
* Identify hazards in relation to trees.
* Conduct a trees survey report, recognizing professional practitioners.
* Define the process of Compartmentalization of Decay in Trees.

**Schedule-Duration**

This module runs for 12 weeks in Semester 2.

* Semester 2: Jan- May 2025, Friday 10 – 12 noon, plus 3 in-person sessions in H. Complex.

## Organic and Sustainable Horticulture (HTSC H3021).

### Application Details

* **Closing date for applications:** 3 Jan 2025 / Teaching **commences** Week starting **27** Jan 2025.
* **Module fee:** €600

### Module Details

* **TU Code:** BN\_EHORT\_SS (BN995) / **Level:** NFQ Level 7 / **Location:** Blanchardstown Campus
* **Award:** Certificate in Organic and Sustainable Horticulture (TU Dublin)
* **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
* **Contact:** email ciarnad.ryan@tudublin.ie

### Overview

The module explores the principles of organic growing, with a particular emphasis on the production methods employed both in the field and within protected structures, when growing organic fruit, vegetables and herbs.

### Minimum Entry Requirements

LC Min grade (Math’s 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

### Course Content

* Principles of organic growing and their applications to domestic and commercial gardens.
* Implications of organic practice for species choice, production cycle and seasonal crops extension.
* The conversion process to an organic system.
* Sil management, plant nutrition and preventative pest measures in an organic production context
* Irish and EU legislation and the organic certification procedures.
* Design and implement organic crop production plans.
* Business supports for the organic grower, root to market.

### Schedule-Duration

This module runs for 12 weeks in Semester 2.

* Semester 2: Jan - May 2025, Monday 10 – 12 noon, plus 3 in-person sessions at H. Complex.

## Environmental Management (HTSC H4027).

### Application Details

• **Closing date for applications:** 2nd Sep 2025 / **Teaching commences** Week starting 27th Sep 2025.

### • Module fee: €600

### Module Details

* **TU Code:** BN\_EHORT\_SS (BN995) / **Level:** NFQ Level 8 / **Location:** Blanchardstown Campus
* **Award:** Certificate in Environmental Management (TU Dublin)
* **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
* **Contact:** email ciarnad.ryan@tudublin.ie

### Overview

The module introduces the student to current environmental policy, legalization and the principles of water quality control, waste management, prevention of air pollution, the planning process, and the sustainable energy usage in Ireland.

### Minimum Entry Requirements

LC Min grade (Math’s 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

### Course Content

* Causes of physical, biological and chemical degradation of soil.
* Water quality in Ireland, pollution sources and their impacts and protection measures.
* Environmental and waste management indicators and the role of the Environmental Protection Agency.
* The Irish planning process, the role of county development plans and environmental impact statements.
* Green business practices, evaluation of the impact of business on the environment.

### Schedule-Duration

This module runs for 12 weeks in Semester 1.

* Semester 1: Sep – Dec 2025, Wednesday 11 – 3pm in H. Complex, Blanchardstown Campus.