



**WAGENINGEN**  
UNIVERSITY & RESEARCH



Online course

# Postharvest Technology

**Are you looking for an update on the latest technologies for storage, packaging and handling of fruit, vegetables, flowers and potted plants? Would you like to broaden and deepen your knowledge of postharvest physiology, ripening and deterioration? Than this course is something for you. One-third of fresh horticultural products is lost during storage and distribution; often because of mismanagement and lack of knowledge of physiological processes in plants. The growing world wide demand for high quality products stresses the need for innovative postharvest technologies to secure sufficient and sustainable global market access.**

## Target group

This online course is designed for technical professionals responsible for quality assurance, marketing, safety, research and extension activities related to fresh horticultural products. The target audience consists of professionals active in the breeding, production, logistics, trade and retail industry with a focus on postharvest quality control.

## Results

After successful completion of this course, you have learned the basic principles behind the factors and processes affecting postharvest quality and understand how to apply this information in your daily practice by developing strategies to maintain postharvest quality.

<b>Date</b>	<b>5 April – 31 May 2022</b>
<b>Location</b>	<b>Online</b>
<b>Duration</b>	<b>6 weeks, 40 hours in total</b>

Course leaders Prof. dr Ernst Woltering  
Dr Julian Verdonk  
Wageningen University & Research

## Outline and topics

This course offers you an attractive mix of online Q&A sessions and self-study including pre-recorded Weblectures by WUR and University of California subject matter experts, knowledge clips and assignments. Online you can consult our experts directly and interact with fellow students. Quizzes are offered throughout the course to test your knowledge. Together you will explore the future challenges of:

- Where & why food loss & waste occurs and how scalable & impactful interventions can be designed.
- Postharvest physiology, ripening and deterioration processes in fresh horticultural products (fruit, vegetables, flowers and potted plants).
- The most important factors for measurement, evaluation and modelling of product quality and loss.
- Current technologies for storage, packaging and handling.

## Programme

Within 40 hours this course will guide you through the many interesting facets of postharvest technology. The **joined kick-off** is on **Tuesday 5 April at 12.00 hrs**, from then onwards you have access to the learning materials. On 4 more dates sessions with our experts are scheduled.

These online Q&A sessions last up to 2 hours, are recorded and can be watched later. *All times are scheduled in CEST / UTC+2*

### Module 1 Introductory

- Course introduction, getting to know each other
- The importance of understanding postharvest technology
- Online Kick-off session: **Tuesday 5 April, 12.00 hrs**

### Module 2 & 3 Societal aspects, Product physiology

- Reducing Food Loss & Waste (FLW), keeping our planet cool, health and taste
- Postharvest product quality, physiological processes, deterioration, genotype, ethylene biology, chilling injury
- Fruit & Vegetables: quality loss, quality from the in- and outside; Ornamentals: PH quality, water balance
- Online Q&A sessions: **Tuesday 12 April, 12.00 hrs**

### Module 4 Application

- Temp management in chains, cooling technology, long-term storage & (reefer) transport, ripening of tropical fruit, MAP & fresh-cut leafy vegetable produce, interactive storage systems, controlled atmosphere & ethylene control pome fruits
- Online Q&A sessions: **Tuesday 26 April, 12.00 hrs**

### Module 5 Pathogens, insect control

- Botrytis, pathogens & disease management in pome fruit, rot problems in tropical fruits, insect control
- Online Q&A sessions: **Tuesday 17 May, 12.00 hrs**

### Module 6 Innovation

- Computer-vision & robotics, LED-light treatments, near-infrared spectroscopy, big data for quality prediction
- Online Q&A sessions: **Tuesday 31 May, 12.00 hrs**
- Evaluation and certificates

## Technical aspects

This course is available on the online learning platform of WUR. Participants sign in with their personal learner account. To follow the course a valid e-mail address is required, speakers or headphones are needed to join and speak up in the Q&A sessions.

## Practical information



The course fee is €1.375,- per person and gives you 2 months access to the course content.

**Special price PhD students and participants from developing countries & upcoming markets.** The special price is €850,- per person. A list of applicable countries is available on the course website.



Between 15 and 60 participants.



After completion of this course a personalised certificate is issued.

## Registration

Enrollment is possible until 20 March 2022, or until the maximum number of participants is reached.

[Register](#)

## Wageningen Academy

We develop and organise trainings and courses for professionals, based on Wageningen University & Research expertise.

## Contact

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tomorrow's business