Post Graduate Certificate in Sustainable Food Systems
(Level 9 – 30 credits)

A Level 9 programme, delivered online, to support the development of knowledge and skills to develop sustainable solutions in the food and drink sector. Includes option to progress to a full MSc in Sustainable Food Systems.

Who should attend?
- Those in industry with full or increased levels of responsibility in sustainability within their businesses. Working in a variety of functions with various 3rd level qualification, but without a qualification in Sustainability.

Education Provider:
- Atlantic Technological University (formerly Institute of Technology, Sligo)

Key Learning Outcomes
- Demonstrate a thorough understanding of policies, best practice, sustainable tools and theories that shape the world of food sustainability systems.
- Apply systems thinking approaches to critically and creatively evaluate the complexity of food systems and identify current and future challenges that may arise when adopting a sustainable system.
- Identify, assess and propose sustainable solutions to real-world systems.

Programme Structure and Content

- 2 x Semesters
    - Semester 1 – Sept-Dec 2023
        - Module 1 – 10 credits / Module 2 – 5 credits
    - Semester 2 – Jan – April 2024
        - Module 3 – 10 credits / Module 4 – 5 credits
    - 2 x group workshops
    - 3 x hours lectures per week (online)

Programme Content

Module 1 – Sustainability and Food and Drink Manufacturing -   10 CREDITS
- Sustainability and Sustainable Development Goals.
- Environmental, social and economic sustainability.
- Ecosystems and natural capital.
- Circular economy and sustainability and opportunities for food manufacturers.
- Circular economy models – EU Farm to Fork Strategy.
- Sustainability in practice and sustainable systems.
- Irish and EU Policy including the common agricultural policy and the European Green Deal.
- Sustainable development indicators.
- Economic methods for measuring sustainability and measuring sustainability beyond money.

Module 2 – Systems thinking – 5 CREDITS
- What is systems thinking?
- Global food systems.
- Systems thinking tools – LCA, Systems Maps, Input-Output Analysis.
- Using systems thinking – fixing broken systems, designing systems and closing material loops.
- Problem solving in a systems context.

Module 3 – Sustainable Food Production – 10 Credits
- Resource use and management worldwide and in Ireland.
- Current status of energy, water and material reserves and usage patterns.
- Pressures on the food sector to improve environmental performance and reduce costs and how resource efficiency achieves both.
- Relevant EU and Irish policy.
- Environmental licensing process including categories of licence (IE, IPC, Waste activity, GHG)
- Resource efficiency frameworks
- Waste management hierarchy.
- Audit development and best practice for the food and drink sector.
- BAT guidance documents.
- Audit implementation, recommendations, and management review.
- Applying the principles of life cycle thinking and life-cycle assessment to the food sector.

Module 4 – Sustainability across the supply chain – 5 Credits
- The principles of sustainable food supply chains, including packaging.
- The role of traceability on sustainable food production.
- Food waste vs food loss.
- Food waste valorisation and recover.
- Contribution of packaging and labelling on food waste.
- Food Labels related to sustainability including front-of-pack, country of origin and voluntary labelling.
- Food choices of consumers including sustainable diets.

Assessment

- A combination of module specific projects (individual and group based) along with 1 large project that links the programme learning with the practical application within the business.

Price
- Non-members - €3,500 per person
- Subsidised price through Food Drink Ireland Skillnet - **€2,250 per participant**

**To book your place or if you require further information,
please contact mark.skinner@ibec.ie**