

Diversey 



Hygiene Academy: e-learning



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# Diversey Online Learning Management System

Diversey Hygiene Academy e-learning courses are hosted on the Diversey Online Learning Management System. The platform simplifies employee training administration, takes cost out of your operations and enables consistent training delivery across your organisation.

Some of the features of this system include:

## Extensive Online Training Library

Large existing library of best-in-class training materials with video and audio features. Online user and administrator websites, available 24/7/365. System portal available in 30 languages.

## Testing, Tracking and Reporting

Powerful reporting capabilities to monitor employee participation, performance and progress. Excel friendly reports allowing quick analysis.

## Cloud-Based Platform

Latest cloud technology that improves user experience and minimizes setup time. No more expensive hardware to purchase or software to install. Convenient self registration.

## Certificates Management

Create, print and digitally sign training certificates. Configure release and expiration policies according to your organizational needs.

## Mobile Learning

Access training content from smart phones or tablets. User experience is optimized for a variety of devices giving you maximum flexibility, Knowledge, Consistency and Accountability

- Build employee knowledge, expertise and confidence with access to best practices
- Drive consistency with the same training delivered to all workers across all locations and in several languages
- Increase accountability by tracking employee participation and provide documentation to workers and supervisors

## Effective, Flexible System

- Self-directed training so each person proceeds at their own pace and quizzes keep users on track as they learn
- Available anytime, when and where you need it, from any Internet connection
- Always up-to-date with new modules added on a regular basis to keep information fresh and relevant

### Bottom Line Savings

- Saves time and reduces expenses associated with travel to training centres
- Lowers operational costs by teaching efficient, effective operational practices
- Leverages Diversey's investment and industry experience, so there's no need to buy and build your own system.

For more information about our Online Learning Management System, please contact your local Diversey representative or visit our website at:

[www.diversey.com](http://www.diversey.com)



## Diversey e-learning courses - Index

CATEGORY	REF	COURSE	COURSE MODULES	CERTIFICATION	
ESSENTIAL COURSES	E1	CHEMICAL SAFETY	Cleaning safely with detergents and disinfectants	Basic	
	E2	PRINCIPLES OF CLEANING	1. Basic hygiene and cleaning concepts 2. Chemistry 3. Food microbiology 4. Disinfection (sanitation) 5. Monitoring and Documentation	Advanced: All 5 modules	
	E3	MICROBIOLOGY	1. Introduction & Growth of Microorganisms 2. Spoilage Organisms 3. Pathogen Organisms	Basic: All 3 modules	
APPLICATION COURSES	A1	OPC	1. OPC Fundamentals 2. OPC Applications	Basic: Module 1	Advanced: Modules 1 & 2
	A2	CIP	1. CIP Concepts 2. CIP Units Concepts: Single Use, Recovery, Static Leg 3. Recovery CIP 4. Static Leg CIP	Basic: Modules 1 & 2	Advanced: All 4 modules
	A3	BOTTLE WASHING	1. Bottle Washing Concepts and Equipments 2. Operational Applications 3. Control Applications	Basic: Module 1	Advanced: All 3 modules
	A4	MEMBRANE CLEANING	1. Basic Membrane Concepts 2. Membrane Materials: Applications restrictions 3. Membrane Cleaning Application	Basic: Module 1	Advanced: All 3 modules
	A5	TRACK TREATMENT	1. Track Treatment Concepts 2. Track Treatment Optimisation	Basic: Module 1	Advanced: Modules 1 & 2
	A6	CRATE WASHING	Crate Washing Application	Advanced	
PROCESS COURSES	P1	GMP FOR FOOD PLANTS	Personal Hygiene and Good Manufacturing Practices in Food Processing	Advanced	
	P2	HYGIENIC DESIGN	Available Q3 2018	Advanced	
	P3	ALLERGENS MANAGEMENT	Available Q2 2018	Advanced	
SPECIFIC MICROBE CONTROL COURSES	S1	LISTERIA	Listeria Management in Food Processing	Advanced	
	S2	CAMPYLOBACTER	Campylobacter Management in Food Processing	Advanced	
	S3	BIOFILM	Managing and controlling Biofilm in a food and beverage production	Advanced	
	S4	SALMONELLA	Available Q1 2018	Advanced	

## ESSENTIAL COURSES

The foundation principles of hygiene to enable you to build an understanding of the role and importance of cleaning.



## Description

Diversey Food Care wants to ensure that all cleaning chemicals are handled properly and safely to prevent accidents that could potentially hurt the user and affect the safety of others. The CLEANING SAFELY WITH DETERGENTS AND DISINFECTANTS course ensures a basic understanding of the potential risks of using cleaning chemicals - and the processes that should be in place to minimise the risk.



## Learning Objectives

The training program will cover key areas to provide a better understanding of how to perform, in a safe manner, cleaning with chemicals.

Key content includes:

- Reasons for cleaning
- How to clean
- The Law
- Chemical Hazards
- Chemical safety
- Protective clothing
- Cleaning up after spillage of chemicals
- First aid treatment



## Suitable for:

The CLEANING SAFELY WITH DETERGENTS AND DISINFECTANTS course should be used as a mandatory training course for all employees.

- Suitable for those employees using cleaning chemicals in their day to day role
- Suitable to those employees who may come into contact with hygiene chemicals





## Description

The principles of cleaning course is a five module introduction to the chemistry, microbiology and physics behind why we clean and disinfect. The course is a foundation for all of our other training courses and it is recommended that it is completed before any of the more advanced courses.

The fundamental principles are explained in a concise way to explain why and how we clean before exploring how hygiene chemicals works and how hygiene procedures should be managed, monitored and documented.



## Learning Objectives

Each of the five modules within the principles of cleaning course has its own objectives. By the end of the series you will understand:

- Why we clean and the consequences of not cleaning
- The types of microorganism related to food and beverage production, the impact they have and how to control them
- How to safely use cleaning chemicals
- The difference between detergents and disinfectants and how they work
- Why and how to monitor cleaning, and how to measure performance
- How and why cleaning should be documented



## Suitable for:

The PRINCIPLES OF CLEANING course is entry level, but in-depth. Designed to introduce or refresh the fundamental principles that underpin cleaning and hygiene.

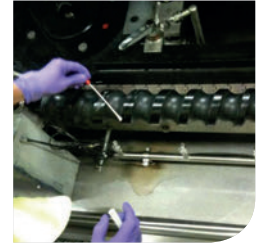
- Suitable for new starters who have not had previous training in hygiene
- Suitable as a recap for employees who are intending to take more advanced courses



## Description

The microbiology course is a three module basic introduction to microorganisms, their impact, and how to control their growth. The course is a foundation for specific microbe control training courses and it is recommended that it is completed before any of the more advanced courses.

The fundamental principles are explained in a concise way to explain the types of microorganism important to food and beverage manufacturing, the conditions they need to grow and how, through altering these conditions, their growth can be controlled.



## Learning Objectives

Each of the three modules within the microbiology course has its own objectives. By the end of the series you will understand:

- The naming and types of microorganism
- The benefits of microorganisms
- The impact they have in food and beverage production
- How to control microorganism growth
- Bacteria, Fungus, Yeast and Virus
- Spores
- Biofilms



## Suitable for:

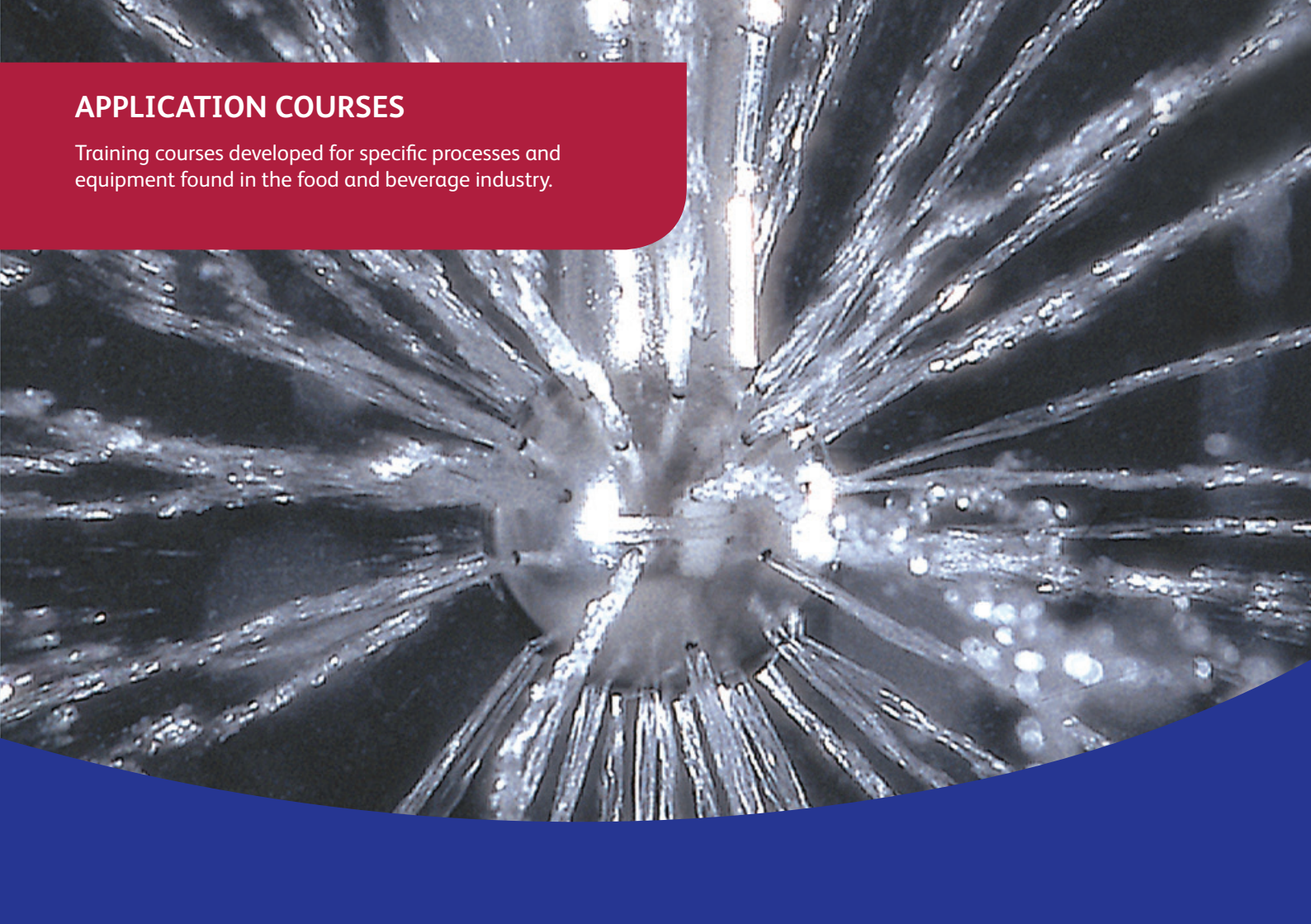
The microbiology course is an entry level course designed to introduce or refresh the fundamental understanding of microorganisms.

- Suitable for new starters who have not have previous training in hygiene
- Suitable as a recap for employees who are intending to take more advanced courses



## APPLICATION COURSES

Training courses developed for specific processes and equipment found in the food and beverage industry.



### Description

Open Plant Cleaning (OPC) is a phrase used to describe the methods of cleaning and disinfection or sanitization of open areas, process equipment and enclosed areas or equipment which might need disassembled prior to cleaning, and exposed surfaces found in the food and beverage industries.

The BASIC OPC course introduces the principle of Open Plant Cleaning, how the methods are employed in the food and beverage industry and the options available to match the OPC to the production process.



### Learning Objectives

On completion of the course you will:

- Understand the definition of OPC – What OPC is and who uses it
- Understand the available methods of chemical application
- Understand TACT and its relationship to cleaning method choices
- Understand the general steps taken to achieve a clean surface
- Understand the interrelationships between soil and surface types



### Suitable for:

The BASIC OPC course is an entry level course designed to build on a basic understanding of cleaning chemistry. It is recommended that trainees have completed the Principles of Cleaning course.

- Suitable for all levels of employees to build an understanding of the basic principles of OPC in the food industry



## Description

Open Plant Cleaning (OPC) is a resource intensive process. Choosing the correct method of cleaning, optimizing the associated cleaning cycle, and choosing the correct cleaner provides the opportunity to provide a cleaned surface with minimal expense of resources and impact on the surfaces being cleaned.

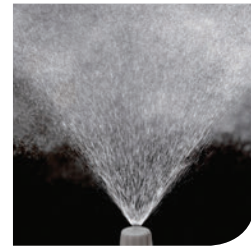
The ADVANCED OPC course aims to equip trainees with the knowledge they need to optimise OPC processes and achieve efficient cleaning.



## Learning Objectives

On completion of the course you will:

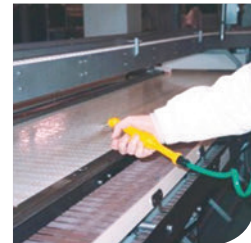
- Be able to choose an OPC method of cleaning
- Understand some of the equipment options available
- Optimize the cleaning method
- Choose the correct type of cleaner (foam level, gel type, etc)
- Understand the interrelationship of each soil and surface



## Suitable for:

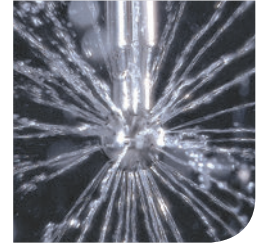
The ADVANCED OPC course is designed to follow the basic OPC course. Trainees should have:

- A general understanding of cleaning
- A general understanding of food plant equipment and plant facilities
- A general understanding of the basics of the chemistry of cleaning
- An understanding of Open Plant Cleaning basics



### Description

Cleaning in Place (CIP) is defined as the process of cleaning and disinfecting the internal surfaces of processing equipment without the need to dismantle or intervene manually. The BASIC CIP course introduces the key principles of CIP system functionality, design and operation and acts as a foundation for further advanced modules.



### Learning Objectives

On completion of the 2 module course you will be able to:

- Describe the elements of a CIP system, and articulate the basic principles of CIP design
- Recognize CIP system types when you come across them
- Be able to explain the basic concepts of flow rate and pressure loss, and know why they are important



### Suitable for:

The BASIC CIP course is an entry level course designed to build a basic understanding of cleaning in place system principles. It is recommended that trainees have completed the Principles of Cleaning course.

- Suitable for all levels of employees to build an understanding of the basic principles of CIP in the food industry
- A prerequisite for the Advanced CIP course



## Description

Cleaning in Place (CIP) systems automate the cleaning cycle, ensuring repeatable results. It is important to understand how the system works in order to ensure the correct program is utilised and resources are not wasted.

The ADVANCED CIP course aims to equip trainees with the knowledge they need to understand the operation of CIP systems including the skills to recognise common problems.

The advanced course comprises of an additional 2 modules to the two covered in the basic CIP course.

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## Learning Objectives

On completion of the course you will:

- Understand the different types of CIP system
- Have the ability to recognise CIP system types and know how they operate
- Understand single use versus recovery systems and the differences in design
- Recognise common CIP issues and be able to highlight them to a specialist if required



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## Suitable for:

The ADVANCED CIP course is designed to build upon the Basic CIP training course.

- Suitable for employees managing CIP processes or who want to build an understanding of CIP system design



### Description

Glass bottles continue to be popular and the preferred package container for beverages, notably beer and carbonated beverages in many countries. In most countries glass bottles are collected from the consumers and either sold back to glass manufacturers or returned to the packaging plant to be re-used.

This course details the process of cleaning and sterilising bottles using bottlewashers as part of the bottling hall.



### Learning Objectives

On completion of the course you will be able to:

- Understand why bottles are washed
- Identify the general process configuration of a bottle washer and general solution flow
- Identify the key elements of the bottle washer and associated equipment and services
- Understand the role of water and its composition in the operation of a bottle washer



### Suitable for:

The BASIC BOTTLE WASHING course is an entry level course designed to build a basic understanding of bottle washing system principles. It is recommended that trainees have completed the PRINCIPLES OF CLEANING course.

- Suitable for all levels of employees to build an understanding of the basic principles of bottle washing
- A prerequisite for the ADVANCED BOTTLE WASHING course





## Description

Bottle Washers operate an automate the cleaning cycle, ensuring repeatable results. It is important to understand how the system works in order to ensure the correct program is utilised and resources are not wasted.

The ADVANCED BOTTLE WASHING course aims to equip trainees with the knowledge they need to understand the operation of the bottlewasher including the skills to recognise common problems.

The advanced course comprises of an additional 2 modules to the module covered in the basic bottle washing course, focusing on Bottle Washer design and operation.

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## Learning Objectives

Each of the three modules within the advanced bottle washing course has its own objectives. By the end of the series you will understand:

- The factors that influence how bottles are cleaned in a bottlewasher
- How the caustic detergent in a bottlewasher can be reclaimed by getting rid of the accumulation of fine suspended solids
- The chemistry of the wash and rinse section products
- The special requirements for package protection
- The observations and tests required to monitor the operational performance of a bottlewasher
- Why, where and how the caustic and additives are dosed and controlled in a bottlewasher
- How to analyse the majority of problems in bottlewashers, identify probable causes and take corrective action

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## Suitable for:

The ADVANCED BOTTLE WASHING course is designed to give an in depth understanding of Bottle washer system and builds on the BASIC BOTTLE WASHING training course.

- Suitable for employees managing the bottle washing processes or who want to build an understanding of system design



### Description

Membrane filtration is used extensively in the food and beverage industry to separate products.

The BASIC MEMBRANE training course aims to introduce the core principles of the use of membranes for filtration, how membranes are cleaned and the various options available to maximise the efficiency of your membrane systems.



### Learning Objectives

To provide a working framework so that you:

- Understand the basic principles of Membranes
- Understand the basic of Membrane design
- Understand different types of Membrane Installations



### Suitable for:

This basic level course is designed to introduce or refresh the fundamental understanding of membrane principles.

- Suitable for new starters who have not had previous training in membranes
- A pre-requisite for employees who are intending to take more advanced courses
- It is recommended that trainees have completed the PRINCIPLES OF CLEANING course prior to taking this module



## Description

This advanced module introduces the different types of membrane filtration system, building a detailed understanding of the core principles and where each system can be used, and understanding the limitations of some membrane installations and how this impacts the cleaning regime.



## Learning Objectives

After completing this course you will:

- Understand the types of Membranes available and where they are used
- Understand the membrane materials available for Microfiltration, Ultrafiltration, Nanofiltration and Reverse Osmosis
- Be aware of the Temperature & pH Limitations for different Membrane Designs & Components
- Understand the Chemistry of Cleaning Membranes



## Suitable for:

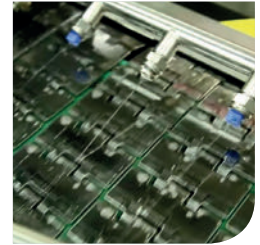
This course is an advanced level module designed to build upon the BASIC MEMBRANE CLEANING course.

- Suitable for employees responsible for the membrane plant efficiency – including site and operations managers, engineers, operators



## Description

Conveyors are essential to the efficient production of beverages and food, allowing fillers and packaging line to operate at maximum capacity. The lubrication of tracks, commonly referred to as Track treatment, ensures full or empty, primary and secondary product packaging can be conveyed around the production site without falling, jamming or resulting in unplanned downtime.



## Learning Objectives

The track treatment training course will introduce the core principles of lubrication system design, how lubrication works and the various options available to maximise the efficiency of your conveyor systems. At the end of this course you will be able to understand:

- Track treatment in the Packaging Hall
- Conveyor set up and design
- Lubrication and reduction of friction
- Gain knowledge on cleaning requirements
- Wet lubricant application principles
- Wet lubricant chemistry and characteristics
- Gain knowledge on lubricant selection



## Suitable for:

This course is a basic level module designed to introduce or refresh the fundamental understanding of conveyor lubrication principles.

- Suitable for new starters who have not had previous training in conveyor lubrication
- A pre-requisite for employees who are intending to take more advanced courses
- It is recommended that trainees have completed the PRINCIPLES OF CLEANING course prior to taking this module



## Description

Advances in track treatment system design and the use of water-free systems offer the potential for food and beverage manufacturers to increase the efficiency of conveyor systems, and reduce resource usage.

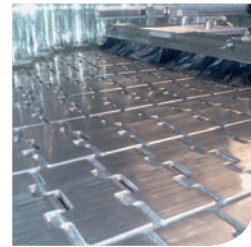
This advanced module introduces the different types of dry and semi-dry track treatment systems, building a detailed understanding of the core principles and the impact these systems can have on key performance indicators.



## Learning Objectives

At the end of this course you will be able to:

- Understand dry track treatment principles
- Understand dry lubricant dosing and control
- Understand dry lubricant application principles
- Gain knowledge on cleaning requirements
- Understand semi-dry track treatment technology
- Understand the different advantages of both technologies



## Suitable for:

This course is an advanced level module designed to build upon the BASIC TRACK TREATMENT course.

- Suitable for employees responsible for the packaging hall efficiency – including site and operations managers, engineers, line operators



**Description**

Crates are used extensively in the food industry to transport ingredients and finished product around a facility and between locations. Crates accumulate debris and are a significant contamination risk if they are not cleaned correctly between uses.

This course details the process of cleaning and disinfecting crates using automated crate washers, looking at the system design, crate types, common soils, and the considerations required to match a cleaning regime to the conditions.



**Learning Objectives**

On completion of the course you will be able to:

- Understand which objects to be cleaned
- Understand general crate washer design
- Gain knowledge about types of soil
- Understand relevant cleaning principles and water chemistry



**Suitable for:**

The CRATE WASHER course is an advanced level course designed to build an understanding of crate washing system principles. It is recommended that trainees have completed the PRINCIPLES OF CLEANING course.

- Suitable for all levels of employees to build an understanding of the principles of crate washing



## PROCESS COURSES

Advanced courses dedicated to site wide best practices.



### Description

The PERSONAL HYGIENE AND GOOD MANUFACTURING PRACTICES course is critical in the food and beverage production environment. Our hands are the number one vector for cross contamination, with the potential to impact the food safety of the product being manufactured.

This advanced course explores the principles of personal care, the behavioural mistakes that often put the product being manufactured at risk and the changes and processes required to reduce the risk of contamination.



### Learning Objectives

On completion of the course you will understand:

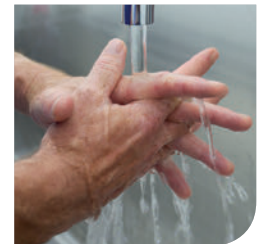
- Contamination sources in a food plant
- Good Manufacturing Practices and standards for the Food and Beverage facilities
- Personal Hygiene
- The need for hand hygiene and the role it plays in reducing cross contamination
- The common behavioural mistakes and how to change them
- How to implement a robust hand hygiene strategy and what components to include



### Suitable for:

The GMP FOR FOOD PLANTS course is an advanced level course designed to develop an in depth understanding of the subject. Given the critical nature of hand hygiene, it is recommended for all employees.

- Suitable for all employees
- It is recommended that trainees have completed the PRINCIPLES OF CLEANING course prior to taking this module





## Description

Hygienic design is a subject that should not only be limited to engineers - because the ability to access and clean all areas of a food processing plant is critical to ensure contamination risks are limited.

This advanced course explores the principles of hygienic design and the mistakes that often put the product being manufactured at risk of contamination.



## Learning Objectives

On completion of the course you will:

- Understand the principles of hygienic design
- Understand the impact non - hygienic design has in food manufacturing
- Understand the regulatory requirements for a hygienically designed process
- Be able to outline the impact of the above on the food processing site
- Be able to review your plant, processes and equipment and highlight areas that do not meet hygienic design guidelines



## Suitable for:

The HYGIENIC DESIGN course is an advanced level course designed to develop an in depth understanding of the subject.

- Suitable for all employees, especially those concerned with factory layout and processing equipment design
- It is recommended that trainees have completed the PRINCIPLES OF CLEANING course prior to taking this module



### Description

Managing allergens in the food manufacturing chain is a legal requirement for processors, with products requiring allergen advice on the label and the impact of inaccurate advice being potentially fatal to allergy sufferers.

This advanced course explores the principles of allergen management in the production environment, focusing on allergen control and removal.



### Learning Objectives

On completion of the course you will:

- Understand what allergens are from a biochemistry perspective
- Understand the impact of allergens to susceptible people
- Understand the regulatory framework
- Be able to outline the impact of the above on the food processing site
- Be able to implement policies and practices to manage allergens within the food production environment



### Suitable for:

The ALLERGEN MANAGEMENT course is an advanced level course designed to develop an in depth understanding of the subject. Given the critical nature of allergen control, it is recommended for all employees.

- Suitable for all employees
- It is recommended that trainees have completed the PRINCIPLES OF CLEANING course prior to taking this module



## SPECIFIC MICROBE CONTROL COURSES

Courses focused on specific microbes that impact food and beverage production. Unique farm to fork approach to the control and reduction of food safety risks within your process.



## Description

Listeria poses a significant risk to the food industry, one of the most prevalent food pathogens and responsible for a high percentage of food related illness. Combatting the risk requires action to be taken at all stages of the production process.

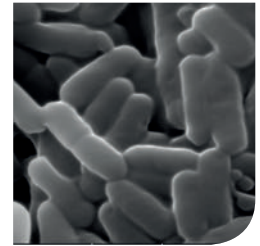
This advanced training course maps the interventions that can be implemented to reduce the risk of listeria contamination at the farm, in transit, during processing and packaging.



## Learning Objectives

On completion of the course you will:

- Understand the Listeria organism and its unique properties
- Be aware of Listeria's presence in food
- Be aware of Listeriosis and the impact to human health
- Understand the impact Listeria has on the food industry
- Understand the preventative measure that can be put in place
- Have an understanding of the key solutions to limit the impact of Listeria



## Suitable for:

The LISTERIA course is an advanced level course designed to develop an in depth understanding of the subject and enable the trainee to implement key learning to reduce the listeria risk in the food industry.

- Suitable for employees in the food industry, especially chilled product
- It is recommended that trainees have completed the PRINCIPLES OF CLEANING and the basic micro course prior to taking this module



## Description

Campylobacter poses a significant risk to the poultry industry and consumers of poultry, it is recognised as one of the most prevalent food pathogens and is responsible for the highest percentage of food related illness and deaths. Combatting the risk requires action to be taken at all stages of the poultry production process.

This advanced training course maps the interventions that can be implemented to reduce the risk of Campylobacter contamination at the farm, in transit, during processing, packaging, retail and at the consumer's home.



## Learning Objectives

On completion of the course you will:

- Understand the Campylobacter organism and its unique properties
- Be aware of Campylobacter's presence in food
- Be aware of Campylobacteriosis and the impact to human health
- Understand the impact Campylobacter has on the Poultry Industry
- Understand the preventative measure that can be put in place
- Be aware of the key intervention points in the poultry process
- Have an understanding of the key solutions to limit the impact of Campylobacter



## Suitable for:

The CAMPYLOBACTER course is an advanced level course designed to develop an in depth understanding of the subject and enable the trainee to implement key learning to reduce the Campylobacter risk in the poultry industry

- Suitable for employees in the poultry processing industry
- It is recommended that trainees have completed the PRINCIPLES OF CLEANING and the basic micro course prior to taking this module



## Description

Biofilms is the term used to describe a bacterial growth of microorganisms on a surface, which form glue-like substances which is difficult to remove and survives in aqueous environments. Whilst not something new, microbiology research has given us a better understanding of how organisms, grow on surfaces, communicate and survive.

This advanced course explores the nature of Biofilms, the impact they have on food processing sites, and how we can combat them in practice.



## Learning Objectives

On completion of the course you will understand:

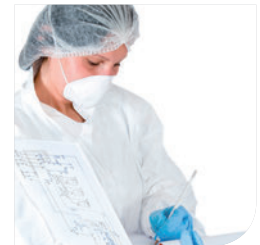
- What a Biofilm is, what they are composed of, and how they develop
- How and why Biofilms communicate
- How to remove Biofilms
- How to control Biofilms in the production environment



## Suitable for:

The BIOFILM course is an advanced level course designed to develop an in depth understanding of the subject and enable the trainee to implement key learning to reduce the Biofilm risk in the food industry

- Suitable for employees in the food industry, especially hygiene related functions
- It is recommended that trainees have completed the PRINCIPLES OF CLEANING and the basic micro course prior to taking this module



## Description

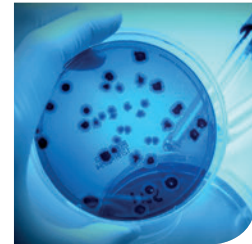
Salmonella poses a significant risk to the food industry, recognised as one of the most prevalent food pathogens and one of the most common causes of food poisoning. Combatting the risk requires action to be taken at all stages of the food production process. This advanced training course maps the interventions that can be implemented to reduce the risk of salmonella contamination at the farm, in transit, during processing, packaging, retail and at the consumer's home.



## Learning Objectives

On completion of the course you will:

- Understand the Salmonella organism and its unique properties
- Be aware of Salmonella's presence in food
- Be aware the impact to human health
- Understand the impact Salmonella has on the food Industry
- Understand the preventative measure that can be put in place
- Be aware of the key intervention points in the processed foods process
- Have an understanding of the key solutions to limit the impact of Salmonella



## Suitable for:

The SALMONELLA course is an advanced level course designed to develop an in depth understanding of the subject and enable the trainee to implement key learning to reduce the Salmonella contamination risk in the food industry

- Suitable for employees in the food industry, especially hygiene related functions
- It is recommended that trainees have completed the PRINCIPLES OF CLEANING course prior to taking this module





Diversey has been, and always will be, pioneers and facilitators for life. We constantly deliver revolutionary cleaning and hygiene technologies that provide total confidence to our customers across all of our global sectors. Led by Dr. Ilham Kadri, President & CEO, and headquartered in Charlotte, North Carolina, USA, Diversey employs approximately 9,000 people globally, generating net sales of approximately \$2.6 billion in 2016.

**For more information, visit [www.diversey.com](http://www.diversey.com) or follow us on social media.**