COURSE OVERVIEW HE1655
Food Microbiology

Course Title
Food Microbiology

Course Date/Venue
August 03-07, 2025/Business Meeting, Crowne Plaza Al Khobar, Al Khobar, KSA

Course Reference
HE1655

Course Duration/Credits
Five days/3.0 CEUs/30 PDHs

Course Description

This practical and highly-interactive course includes real-life case studies where participants will be engaged in a series of interactive small groups and class workshops.

This course is designed to provide participants with a detailed and up-to-date overview of Food Microbiology. It covers the comprehensive understanding of the role of microorganisms in food systems. Participants will gain a solid foundation in food microbiology, learning to identify foodborne pathogens and spoilage organisms that affect food quality and safety.

The course covers essential laboratory test methods used to detect and analyze these microorganisms, ensuring accurate interpretation of results. Additionally, it explores microbial presence in processing environments, shelf life testing, and techniques for effective food preservation.

During this interactive course, participants will learn the basics regarding food microbiology including the foodborne pathogens and spoilage organisms; the laboratory test methods; and the microorganisms in processing environments, shelf life testing and food preservation.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply a good knowledge on food microbiology

- Discuss and review the basics regarding food microbiology including the foodborne pathogens and spoilage organisms

- Interpret the laboratory test methods

- Explain the microorganisms in processing environments, shelf life testing and food preservation

Who Should Attend

This course provides an overview of all significant aspects and considerations of food microbiology for those involved in food microbiology testing, quality control, quality assurance, sanitation and food production who need to increase their knowledge and skills in basic and applied food microbiology and food safety.

Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Fee

US$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations:

- The International Accreditors for Continuing Education and Training (IACET - USA)

  Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

  Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

  Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

Dr. Mohamed Elsayed, PhD, MSc, BSc is an **HACCP Expert** with over **25 years** of experience in **HACCP Standards**, **HACCP Accreditation**, **HACCP Application**, **Food Hygiene**, **Food Safety** and **Analytical Laboratory Management**. He is an **authority** in **Food Analysis** & Quality Control, Quality Management Systems (**ISO 17025**, **ISO17020**, **15189** and **9001**), Laboratory Accreditation, Laboratory Auditing, Statistical Analysis of Laboratory Data, Chemical Laboratory Management, Good Laboratory Practices (**GLP**), Uncertainty Measurement, **Process Analyzers**, **GC** and **HPLC**. Further, his wide experience and expertise also cover **Food Safety Management**, **Hazard Analysis of Critical Control Points** (**HACCP**), **Food Sampling** and **Food Additives**. He is currently a **Consultant** and **Lead/Technical Assessor** in various industries wherein he provides technical assistance & expert services, consultancy and training services for testing and calibration of laboratory equipment, guiding medical laboratories to establish their quality management systems and develop accreditation based on **ISO17025/15189** requirements, designing validation/verification schemes for all test methods, estimation of uncertainty and planning & developing laboratories towards accreditation.

In his career life, Dr. Mohamed has served as a **Senior Expert**, **Lead Technical Auditor**, **Project Manager**, **Quality Manager** and **Senior Analytical Chemist** for **Government Companies** and **Internationally Funded Projects**. He has **participated** in the **accreditation** of more than **100 laboratories globally** and as a **Senior Accreditation Expert** he has participated in the development of more than 35 laboratories towards being ISO 17025 Accredited.

Dr. Mohamed has **PhD** and **Master** degrees in **Environmental Analytical Chemistry** and **Bachelor's** degree in **Chemistry**. He is a **Certified Auditor** of **ISO 17025**, **ISO 15189**, **ISO 9000** and **ISO 14000**. Further, He is an active member of the **Society for Analytical Chemists**, Association of Official Analytical Chemists (**AOAC**) and the **Egyptian Society for Quality**.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1:   *Sunday, 03rd of August 2025*

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Food Microbiology 101-Review of Basics***
0930 – 0945	*Break*

0945 – 1100	**Foodborne Pathogens**
1100 – 1215	**Foodborne Pathogens (cont'd)**
1215 – 1230	*Break*
1230 - 1420	**Spoilage Organisms**
1420 – 1430	**Recap**
1430	*Lunch & End of Day One*

Day 2:   **Monday, 04th of August 2025**

0730 – 0900	**Putting Your Operation to the Test**
0900 – 0915	*Break*
0915 – 1200	**Putting Your Operation to the Test (cont'd)**
1200 – 1215	*Break*
1215 – 1230	**GLP & Biosafety**
1230 – 1420	**GLP & Biosafety (cont'd)**
1420 – 1430	**Recap**
1430	*Lunch & End of Day Two*

Day 3:   **Tuesday, 05th of August 2025**

0730 – 0930	**Laboratory Test Methods**
0930 – 0945	*Break*
0945 – 1100	**Laboratory Test Methods (cont'd)**
1100 – 1230	**Test Method Considerations**
1230 – 1245	*Break*
1245 – 1420	**Test Method Considerations (cont'd)**
1420 – 1430	**Recap**
1430	*Lunch & End of Day Three*

Day 4:   **Wednesday, 06th of August 2025**

0730 – 0930	**Microorganisms in Processing Environments**
0930 – 0945	*Break*
0945 – 1100	**Microorganisms in Processing Environments (cont'd)**
1100 – 1230	**Shelf-Life Testing**
1230 – 1245	*Break*
1245 – 1420	**Shelf-Life Testing (cont'd)**
1420 – 1430	**Recap**
1430	*Lunch & End of Day Four*

Day 5:   **Thursday, 07th of August 2025**

0730 – 0930	**Food Preservation**
0930 – 0945	*Break*
0945 – 1100	**Food Preservation (cont'd)**
1100 – 1215	**Validation/Challenge Studies**
1215 – 1230	*Break*
1230 – 1345	**Validation/Challenge Studies (cont'd)**
1345 – 1400	**Course Conclusion**
1400 – 1415	**POST-TEST**
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises:-
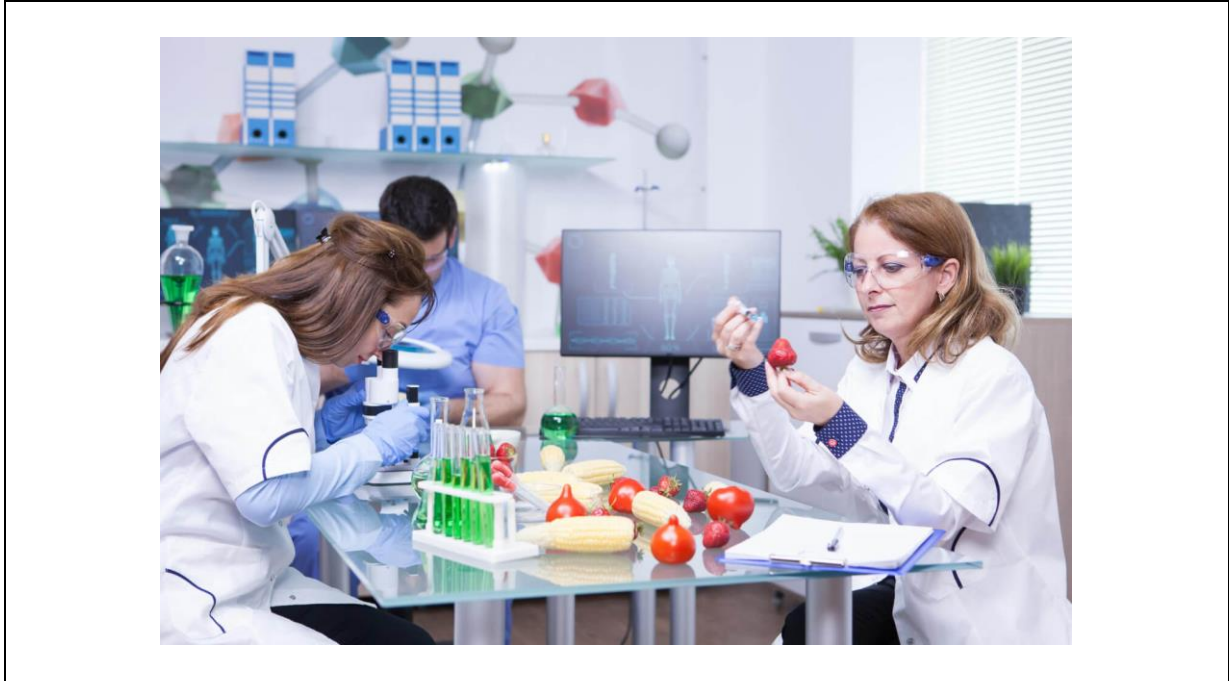
Course Coordinator

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