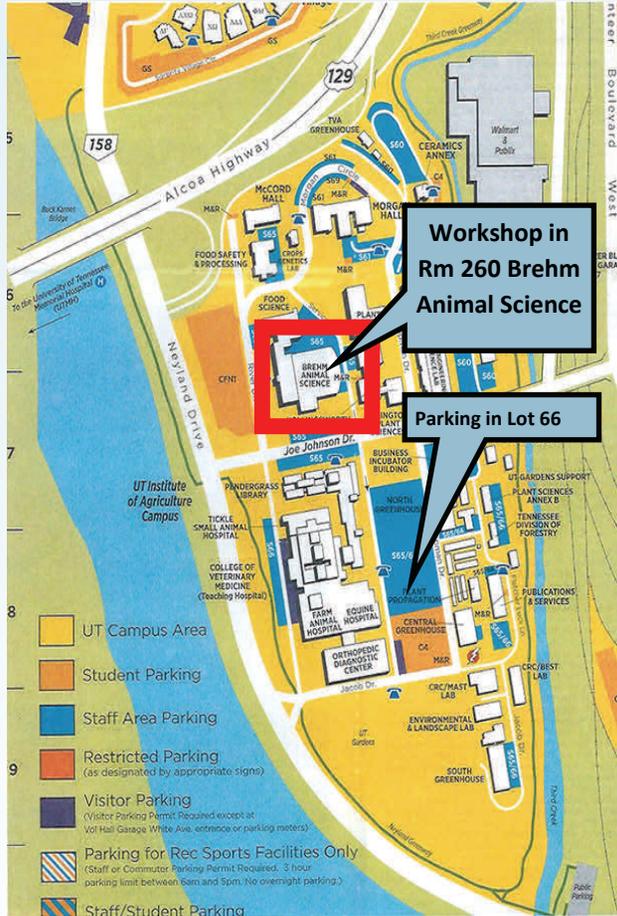


Travel Info: maps & directions
<https://ag.tennessee.edu/Pages/directions.aspx>



Accommodations:

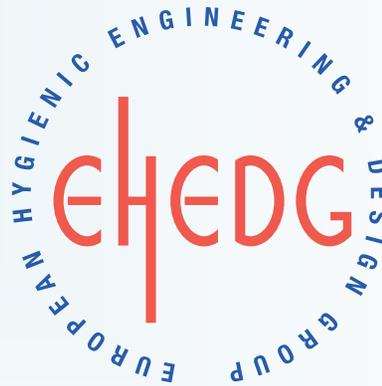
Participants are responsible for arranging their own lodging. We have reserved a block of rooms at \$88/night at the Holiday Inn Knoxville Downtown, 525 Henley St., Knoxville, TN 37902, phone 865-522-2800. To receive this rate, the group code is "EHEDG" This rate is good until August 19, 2015.

UT EHEDG Authorized Test Institute

University of Tennessee



September 9-11, 2015



EHEDG Advanced Course on Hygienic Design

For Food Processing Equipment Manufacturers and End Users

THE UNIVERSITY of TENNESSEE 

INSTITUTE of AGRICULTURE

 Food Science
and Technology

1. Introduction

Hygienic design of equipment and facilities is one of the main tools that food, pharmaceutical and cosmetics companies have in order to achieve their final aim of guaranteeing the safety of the products they manufacture. These industries and food equipment manufacturers should be aware of the importance of hygienic aspects in the activities they carry out. EHEDG (European Hygienic Engineering and Design Group) provides practical guidance on hygienic engineering for manufacturing safe and wholesome food. Founded in 1989, it is a consortium of equipment manufacturers, food companies, research and educational institutes as well as public health authorities whose common aim is to promote hygiene during the processing and packaging of food products.

The UT EHEDG Testing Laboratory has is the only EHEDG Authorized Test/Certification Institute in North America.

2. Aim

The course gives knowledge and insight into the hygienic design of equipment and processes for the food industry and benefits of hygienic design to satisfy the needs of equipment manufacturers and food processors. These include minimal down time, maintenance, cleaning costs, environmental impact and efficient cleaning, optimal product safety and constant product quality.

3. Methodology

This is a practical applications course. The fundamentals of the various topics are presented and related to practice by means of examples. Participants will apply and test their knowledge with case studies in the pilot plant. The course provides tools to solve hygienic problems within your own organization. Because of the small groups the course is very interactive.



The cost for the course is \$1495 including hand-outs, hands-on exercises, and meals.

REGISTER by July 31

and get a discounted rate on the course price and pay \$1300. Pre-registration is mandatory. The University reserves the right to limit enrollment; however, no school will be offered to fewer than 10 participants.

Preferred method of registration is online with a credit card. Register online at:
https://secure.touchnet.com/C21610_ustores/web/product_detail.jsp?PRODUCTID=564

For questions, please contact us at:

Dr. Mark Morgan
The University of Tennessee
Food Science & Technology
Room 201 Food Science Bldg.
Knoxville, TN 37996-4539
865-974-7331
foodsci@utk.edu

program

Module	Day 1	Topic
1	8:30 - 9:00	Welcome; Introduction speakers panel; participants; program
2	9:00 - 10:15	3A & EHEDG Legal Requirements
	10:15 - 10:30	Coffee break
3	10:30 - 12:00	Hazards in hygienic processing
	12:00 - 13:00	Lunch
4	13:00 - 14:30	Hygienic design criteria
5	14:30 - 16:00	Material of construction
	16:00 - 16:15	Coffee break
6	16:15 - 17:00	Case Study-Open Equipment
Dinner	18:30	Toscana (Bus leaves Food Science @ 18:00)

Module	Day 2	Topic
7	8:30 - 9:15	Welding stainless steel
8	9:15 - 10:00	Static seals and couplings
	10:00 - 10:15	Coffee break
9	10:15 - 11:45	Cleaning and disinfection
	11:45 - 12:45	Lunch
10	12:45 - 13:45	Valves
11	13:45 - 14:15	Pumps (dynamic seals)
12	14:15-15:15	Design for Cleanability
	15:15 - 15:30	Coffee break
13	15:30 -17:00	Case study-Valves, Pumps, Couplings
Dinner	18:30	Mcgraw's (Bus leaves Food Science @ 18:00)

Module	Day 3	Topic
14	8:30 - 10:00	Verification / Test methods, Certification
	10:00 - 10:15	Coffee break
15	10:15 - 11:00	Building and process layout
16	11:00 - 12:15	Installation and maintenance. Lubricants
	12:15-13:15	Lunch
17	13:15 - 14:45	Case study. Cleanability Demonstrations
	14:45 - 15:15	Student course evaluation—Final Exam

4. Why attend

Attendees will:

- gain practical and theoretical understanding of hygienic design and the benefits for manufacturers and users of food processing equipment
- be able to identify non-hygienic features, improve equipment designs, and make better informed decisions about equipment purchases.

5. Previous training and working experience

Although not required, the participants should have some previous practical experience in hygienic design.

6. Course data and location

The course will be held in the facilities of **The University of Tennessee, Department of Food Science** on September 9-11, 2015. Lunches and two dinners are included.

7. Instructors

- Mark T. Morgan - University of Tennessee, EHEDG Test Institute Director
- Andy Timperley -EHEDG Authorized Test Institute and Training member, Timperley Consulting, UK
- Gabe Miller - Process Innovation– Food Safety, 3A Certified Conformance Evaluator

8. Certificate

An attendance certificate will be provided at the end of the course and those who pass a final exam can be listed on the EHEDG website

9. Costs

The cost for the course is \$1495 including hand-outs, hands-on exercises, and meals. **Register by July 31** and pay \$1300.

10. 3-A Standards

A comparison of some 3-A standards and EHEDG guidelines will be included. Advanced hygienic design principles of food processing equipment to improve safety and minimize down time, maintenance, and cleaning costs will be covered.

