COURSE OVERVIEW HE0057
Certified Ergonomics Essentials

Course Title
Certified Ergonomics Essentials

Course Reference
HE0057

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

Course Date/Venue

Session(s)	Date	Venue
1	February 24-28, 2025	Ajman Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
2	June 15-19, 2025	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
3	October 05-09, 2025	TBA Meeting Room, Taksim Square Hotel, Istanbul, Turkey
4	December 07-11, 2025	Al Khobar Meeting Room, Hilton Garden Inn, Al Khobar, KSA

Course Description

This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using industrial hygiene simulator.

This course aims to provide a broad based introduction to ergonomic principles and their application in design of work, equipment and the workplace. Consideration is a given to musculo-skeletal disorders, manual handling, ergonomics aspects of the environment as well as to the social and legal aspects.

On completing this course successfully, the participants will have a basic understanding of the following:-

- Understand and apply ergonomic principles to the creation of safer, healthier and more efficient and effective activities in the workplace
- Understand ergonomic risk assessments and appropriate control measures
- Understand the causes of upper limb disorders and how to reduce them
- Appreciate workplace layout and equipment design
- Appreciate environmental aspects of good ergonomic design

Course Objectives

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

- Apply and gain an in-depth knowledge on ergonomics essentials
- Recognize ergonomics covering its importance, benefits, process, risk factors, assessments, risk assessment tools, controls and scope of ergonomics
- Discuss occupational ergonomics covering systems of work, human characteristics and limitations, the ergonomist's role, biological ergonomics, body systems and functions, the musculoskeletal system, posture and movement, biomechanics and anthropometry
- Explain work physiology as well as apply systematic ergonomics methods and techniques covering work design, work design, work organization, poor work design problems, user trials and problem solving
- Carryout ergonomics risk management and identify the musculo-skeletal disorder including parts of body at risk, impact of MSDs, characteristics of tasks, work tasks and nature & causes of manual handling disorders
- Assess standards and social aspects through developing ISO standards, ISO/TC 159, training, experience & skill development, health information, health information risk management and measuring the impact of ergonomics
- Apply risk control and determine vision and lighting, noise, thermal environment, vibration, smell, taste and touch
- Recognize clothing and personal protective equipment
- Use pareto analysis and project scheduling using program evaluation and review technique (PERT)

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, sample video clips of the instructor's actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of ergonomics essentials for health and safety professionals, occupational health specialists including physicians, nurses. Specialists in subjects such as acoustics, ergonomics, human factors, occupational psychology, work organization, biosafety, engineering, analytical chemistry and those who want a broader appreciation of how their role interfaces with other professions over health issues in the workplace will find this course beneficial.

Course Certificate(s)

(1) Internationally recognized Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Certificates are valid for 5 years.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-

(2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.

Haward Technology Middle East

Continuing Professional Development (HTME-CPD)

CEU Official Transcript of Records

TOR Issuance Date: 14-Nov-22

HTME No. 74852

Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE0057	Certified Ergonomics Essentials	November 10-14, 2022	30	3.0

Total No. of CEU's Earned as of TOR Issuance Date **3.0**

TRUE COPY

Jaryl Castillo
Academic Director

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

P.O. Box 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 714 | E-mail: info@haward.org | Website: www.haward.org

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:

Mr. Raymond Tegman is a **Senior HSE Consultant** with extensive experience within the **Oil & Gas**, **Petrochemical** and **Refinery** industries. His broad expertise widely covers in the areas of **Rigging** Safety Rules, Machinery & Hydraulic **Lifting Equipment**, Handling **Hazardous Chemicals**, Spill Containment, **Fire** Protection, **Fire** Precautions, **Incidents & Accidents** Reporting, **HSEQ** Audits & Inspection, **HSEQ** Procedures, **Environmental** Awareness, **Waste** Management Monitoring, **Emergency Planning**, **Emergency** Management, **Working at Heights**, **Root Cause Analysis**, **HSE** Rules & Regulations, Process Safety Management (**PSM**), Process Hazard Analysis (**PHA**), Techniques, **HAZOP**, **HSE** Risk, **Pre-Start-up Safety** Reviews, **HSE Risk** Identification, Assessments & Audit, **HSE Risk** Assessment & Management Concepts, **HSE Management** Policy & Standards, **HSSE Emergency Response & Crisis Management** Operations, **Confined Space Entry**, **Quantitative Risk Assessment** (**QRA**), Hazardous Materials & Chemicals Handling, Safety Precaution & Response Action Plan, **Hazard & Risk** Assessment, Task Risk Assessment (**TRA**), **Incident Command**, **Accident & Incident Investigation**, **Emergency Response Procedures**, Job Safety Analysis (**JSA**), Behavioural Based Safety (**BBS**), **Fall Protection**, **Work Permit & First Aid**, Lock-out/Tag-out (**LOTO**), **Emergency Response**, **Construction** Supervision, **Scaffolding** Inspection, **HAZCHEM**, Manual Material Handling, **Road Traffic** Supervision, ISO 9001 and OHSAS 18001.

During his career life, Mr. Tegman has gained his practical and field experience through his various significant positions and dedication as the **Operations Manager**, **Safety & Maintenance Manager**, **Safety Manager**, **Road/Traffic Supervisor**, **Assessor/Moderator**, **Safety Consultant**, **Safety Advisor**, **Safety Officer** and **Liaison Officer** from Zero Harm, SHRA Training & Services (Health & Safety), Road Crete, Balwin Property Development, DEME International, Gladstone Australia, Godavari Gas Pipeline and New Castle NCIG.

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

Abu Dhabi	**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
Dubai	**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
Istanbul	**US$ 6,000** per Delegate + **VAT**. This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Al Khobar	**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 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

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***International Module W506 Ergonomics Essentials***
0930 – 0945	*Break*
0945 – 1030	***Overview of Ergonomics*** *Ergonomics Definition ● The Human at Work ● Scope of Ergonomics ● Benefits of Ergonomics ● Occupational Ergonomics ● Systems of Work ● Human Characteristics & Limitations ● Human Error ● Teamwork ● Ageing Workforce ● The Ergonomist's Role ● Biological Ergonomics ● Body Systems & Functions*
1030 - 1230	***Overview of Ergonomics (cont'd)*** *The Musculoskeletal System ● Posture & Movement ● Biomechanics ● Biomechanics & the Musculoskeletal System ● Anthropometry ● Work Physiology ● Psychology at Work ● Issues to Consider ● Perception & Cognition ● Memory ● Decision Making ● Perception of Risk ● Signal Detection Theory*
1230 – 1245	*Break*
1245 – 1420	***Overview of Ergonomics (cont'd)*** *Vigilance ● Motivation & Behavior ● Work Stress ● Work Organization ● Rest & Work Breaks ● Developing an Ergonomics Strategy ● Issues to Consider ● Workplace Culture & Systems ● Macro-Ergonomics ● Participatory Ergonomics ● Ergonomics in Design ● Professional Ergonomist ●Ergonomics: Seeing the Whole Picture*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	***Ergonomics Methods & Techniques*** *Work Design ● Work Organization ● Poor Work Design/Problems ● User Trials ● Problem Solving ● Ergonomics Risk Management ● Hazards & Risks*
0930 – 0945	*Break*
0945 – 1100	***Ergonomics Methods & Techniques (cont'd)*** *Ergonomics Hazard Identification ● Ergonomics Risk Assessment ● Measurements & Information Gathering ● Ergonomics Standards ● Ergonomics Guidance ● Which Ergonomic Assessment Method ● Ergonomic Assessment Methods*
1100 – 1230	***Musculoskeletal Disorders (MSDs)-Part 1*** *Introduction & Definition ● Parts of Body at Risk ● Impact of MSDs ● Characteristics of Tasks*
1230 – 1245	*Break*
1245 – 1420	***Musculoskeletal Disorders (MSDs)-Part 1 (cont'd)*** *Examples of Work Tasks ● Nature & Causes of Manual Handling Disorders*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3

0730 – 0930	***Standards & Social Aspects*** *Developing ISO Standards ● ISO/TC 159 ● Training, Experience & Skill Development ● Health Information*
0930 – 0945	*Break*
0945 – 1100	***Standards & Social Aspects (cont'd)*** *Health Information Risk Management ● Measuring the Impact of Ergonomics*
1100 – 1230	***Musculoskeletal Disorders (MSDs)-Part 2*** *Musculoskeletal Disorders (MSDs) ● Nature & Causes of Manual Handling Disorders ● Low Back Disorders ● Risk Identification ● Risk Assessment Strategies ● Detailed Ergonomics Methods ● Examples of these Ergonomics Methods ● Other Ergonomics Methods*
1230 – 1245	*Break*
1245 – 1420	***Musculoskeletal Disorders (MSDs)-Part 2 (cont'd)*** *Risk Control ● Example of Workplace Modification ● Use of Mechanical Aids ● Principles of Manual Handling ● General Guidance for Lifting & Handling ● Lifting & Lowering Mass Guidance ● Work-Related Upper Lim Disorders (WRULDS) ● The Upper Limb ● Types of Grip ● UL: Injury Mechanisms ●WRULD: Risk Identification ● WRULD: Risk Assessment ● WRULD: Risk Control*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4

0730 – 0930	***Workplace, Job & Product Design -Part 1*** *Work Environment Introduction & Definition ● Principles of Work System Design ● Layout of Workspaces ● General Considerations ● Workstation & Equipment Design ● Workstation Design -Principles ● Workstation Design- Horizontal Work Area*
0930 – 0945	*Break*
0945 – 1100	***Workplace, Job & Product Design -Part 1 (cont'd)*** *Workstation Design-Work Position ● Workstation Horizontal Working Height ● Workstation Design- Viewing Distances & Angles ● Workstation Design-Anthropometric Requirements ● Equipment Design -Tools*
1100 – 1230	***Workplace, Job & Product Design -Part 2*** *Chairs & Seating ● Optimum Sitting Position ● Vehicle Cab Design ● Vehicle Cab Design- Seats ● Computer (VDT) Workstations ● Computer Equipment ● Assessing Computer (VDT) Workstations ● Information, Displays & Controls*
1230 – 1245	*Break*
1245 – 1420	***Workplace, Job & Product Design -Part 2 (cont'd)*** *Information, Displays & Controls – Design Principles ●Visual Displays ● Auditory Displays ● Quantitative & Qualitative Displays ● Danger & Information Signals ● Safety Signs & Labels ● Controls ● Controls & Combability ● Principles of Software Ergonomics*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

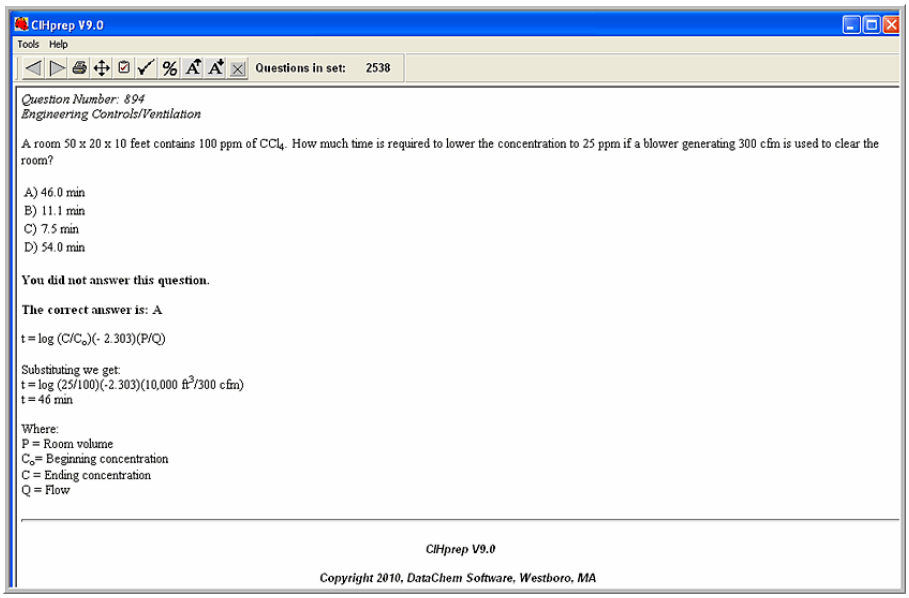
Day 5

0730 – 0930	***Vision & Lighting*** *Structure of the Eye ● Visual Acuity ● Colour Vision ● Vision in Low Light ● ● Contrast Sensitivity ● Glare ● Reflections ● Illuminance ● Luminance ● Luminaires ● Lightning Design ● Reducing Eye Strain*
0930 – 0945	*Break*
0945 – 1030	***Vision & Lighting (cont'd)*** *Noise ● Structure of the Ear ● Hearing Problems ● Nuisance Noise ● Measuring Noise ● Typical Noise Levels ● Controlling Noise ● Thermal Environment ● Factors Affecting the Thermal Environment*
1030 – 1145	*Break*
1145 – 1200	***Vision & Lighting (cont'd)*** *Impact of Heat Stress ●Exposure to Heat ● Exposure to Cold ● Thermal Comfort Surveys ● Vibration ● Hand- Transmitted Vibration ● Whole Body Vibration ● Smell, Taste & Touch ● Senses at Work ● Smell & Taste ● Skin & Touch*
1200 – 1300	***Vision & Lighting (cont'd)*** *Clothing & Personal Protective Equipment Ergonomics Considerations ● Protective Clothing ● Footwear ● Gloves ● Eye Protection & Head Protection ● Hearing Protection ● Risk Perception & PPE Use ● Ergonomics Considerations with PPE Use ● PPE Use*
1300 – 1315	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1315 – 1415	***COMPETENCY EXAM***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Simulator (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the state-of-the-art "Industrial Hygiene Virtual Laboratory Simulator" and "CIHprep V9.0 Simulator".

Industrial Hygiene Virtual Laboratory Simulator



CIHprep V9.0 Simulator

Course Coordinator

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