COURSE OVERVIEW HE0858

Industrial Hygiene Certification Program
W506: Ergonomics Essentials

(Accredited by OHTA-BOHS)

Course Title

Industrial Hygiene Certification Program: W506: Ergonomics Essentials *(Accredited by OHTA-BOHS)*

Course Date/Venue

November 03-07, 2024/Oryx Meeting Room, Doubletree Hilton Doha, Al-Sadd, Doha, Qatar

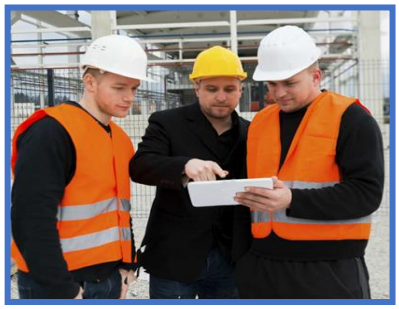
Course Reference

HE0858

Course Duration

Training: Five days/4.5 CEUs/45 PDHs
Exam: One day/3 Hours
Total: 6 Days

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 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, participants will be able to:-

- Apply ergonomic principles to the creation of safer, healthier and more efficient and effective activities in the workplace
- Conduct ergonomic risk assessments
- Develop appropriate control measures for ergonomic risk factors
- Describe work-related causes of musculo-skeletal disorders
- Design a workplace according to good ergonomic principles
- Assess ergonomic aspects of the working environment and work organization

The course normally run as a taught course over 5 days (minimum of 45 hours including lectures, tutorials, practical/demonstration sessions, guided reading, overnight questions and examination). There will be a 40 short answer question "open book" examination with an allowed time of 120 minutes.

This course is designed to provide participants with a detailed and up-to-date overview of ergonomics. It covers the general principles of ergonomics including the biological ergonomics, psychology and developing ergonomics strategy at work; the ergonomics methods and techniques covering work design, ergonomics risk assessment, measurement and information gathering; the musculo-skeletal disorder including manual handling and work-related upper limb disorders (WRULD); and the workplace, job and product design, workplace layout and equipment design, controls, display and information.

During this interactive course, participants will learn the relevant physical factors of the work environment comprising of lighting, noise, thermal environment, other considerations, clothing and protective equipment; the ISO standards and sources of standards; the training need analysis; the testing and interview techniques; and the instruction and supervision for health information, legal instruments, records and measuring health and illness.

Course Objectives

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

- Achieve the OHTA-BOHS Certificate in W506: Ergonomics Essentials
- Discuss the general principles of ergonomics including the biological ergonomics, psychology and developing ergonomics strategy at work
- Employ ergonomics methods and techniques covering work design, ergonomics risk assessment, measurement and information gathering
- Identify musculo-skeletal disorder including manual handling and work-related upper limb disorders (WRULD)
- Carryout workplace, job and product design, workplace layout and equipment design, controls, display and information
- Determine relevant physical factors of the work environment comprising of lighting, noise, thermal environment, other considerations, clothing and protective equipment
- Review ISO standards and sources of standards as well as carryout training need analysis
- Employ testing and interview techniques including instruction and supervision for health information, legal instruments, records and measuring health and illness

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**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of ergonomics for health and safety professionals, occupational health specialists including physicians and nurses. Specialists in subjects such as acoustics, ergonomics, human factors, occupational psychology, work organisation, 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.

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$ 7,500 per Delegate. 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)

(1) BOHS Certificates will be issued to participants who have successfully completed the course and passed the exam of the course.

BOHS Certificate(s)

The following certificate is a sample of the BOHS certificates that will be issued to successful candidates:-

Faculty of Occupational Hygiene

BOHS

Wasef Al Hajri

has successfully completed the

W506: Ergonomics

Supported by

ABIH

OH learning.com
advancing occupational hygiene worldwide

IOHA

Ian Kellie
Chief Examiner

June 2017
Certificate No. 20170608-24846-3996

BOHS, 5/6 Melbourne Business Court, Millennium Way, Pride Park, Derby, DE24 8LZ, UK
BOHS Incorporated by Royal Charter No. RC000858 Registered Charity No. 1150455

(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)

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CEU Official Transcript of Records

TOR Issuance Date: 08-June-17

HTME No. PAR213391

Participant Name: Wasef Al Hajri

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE858-IH	**W506: Ergonomics**	June 04-08, 2017	45	4.5

Total No. of CEU's Earned as of TOR Issuance Date **4.5**

TRUE COPY

Marcel De Guzman
Academic Director

Haward Technology is an Authorized Training Provider by the International Association for Continuing Education and Training (IACET), 11130 Sunrise Valley Drive, Suite 350 Reston, VA 20191, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2013 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 1-2013 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 | Fax: +971 2 3091 716 | E-mail: info@haward.org | Website: www.haward.org

Certificate Accreditations

Haward Technology is accredited by the following international accreditation organizations:-

- The British Occupational Hygiene Training Association (OHTA-BOHS)

  Haward Technology is an OHTA Approved Training Provider under the W201 and W500 series modules that promote better standards of occupational hygiene practice throughout the world. OHTA is the British Occupational Hygiene Training Association.

  Haward Technology supports hygiene professionals who wanted people around the world to enjoy the benefits of healthy working environments.

- 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 **4.5 CEUs** (Continuing Education Units) or **45 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. Peter Jacobs, is a **Senior HSE Consultant** with almost **25 years** of extensive experience within **Oil & Gas**, **Refinery** and **Petrochemical** industries. His wide experience covers in the areas of **Incident Command & Report Writing**, **HAZOP**, **HAZMAT**, **HAZID**, **Health Risk** Assessment, Modern **Safety Risk** Management, **Process Risk** Management, **Root Cause Analysis** Techniques, **HSE Management System** Development & Implementation, Handling **Hazardous Chemicals**, **Industrial Safety** & Housekeeping, **Job Safety & Hazard** Analysis, **Hazardous Substances** Measurement, **Workplace** Control, Physical Agents, **Emergency Response**, **Chemical & Biological** Operations, Basic **Safety & Loss Prevention**, Safety in **Chemical Laboratory**, **Confined Space Safety**, **Industrial Hygiene**, **Occupational Health & Hygiene**, **Ergonomics**, **Biological** Assessment, **Radiation** with Radon/Thoron Assessment, **Radiation** Protection Safety, **Radiation** Monitoring, Natural **Radiation** Sources, **Nuclear** Regulatory Act, **Industrial Ventilation**, **Air Pollution Dispersion** Modelling, Basic Clandestine **Drug Laboratory** Investigation, **Chemical** Engineering, **Fire** Safety & Evacuation, **Evacuation** Safety, Safety Orientation, Hand & Power Tools Safety, Isokinetic Stack Sampling, Dust Exposure, Quantifying Workplace Stressors, Noise & Airborne Pollutants, Thermal Stress, Illumination, Mine Health & Safety, Statistical Method Validation, Legal Audit Compliance, Riot & Crowd Control, ISO 14000, OHSAS 18000, ISO 17025 and ISO 9000.

During his career life, Mr. Jacobs has gained his practical and field experiences through his various significant positions and dedication as the **Forensic Science Laboratory Manager**, **Occupational Hygienist**, **Radiation Protection Officer**, **Lead Practitioner**, Safety, Health & Environmental (**SHE**) **Specialist**, **First Responder**, **OHS Inspector**, **Ambulance Assistant** and **LPG Distributor Auditor** from various international companies like the Sedulitas, Richards Bay Minerals, Sasol and South African Police Service.

Mr. Jacobs has a **Master's** degree in **Public Health – Occupational Hygiene**, a **National Diploma** in **Purchasing Management** and held an Intermediate Certificate in Mine Environmental Control. Further, he is a **Certified Instructor/Trainer**, an Appointed Commissioned Officer, a SAIOH/ IOHA President, an Assessor/Moderator of Health & Welfare SETA, a **Registered Occupational Hygienist** of the Southern African Institute for Occupational Hygiene, awarded as a SAIOH **Occupational Hygienist** of the Year Award and a well-regarded member of the British Occupational Hygiene Society (**BOHS**), Mine Ventilation Society of South Africa (MVSSA) and South African Radiological Protection Association (SARPA). He has further delivered numerous trainings, courses, seminars, workshops and conferences worldwide.

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 November 2024***

0730 – 0745	*Registration & Coffee*
0745 – 0800	*Welcome & Introduction*
0800 – 0815	***PRE-TEST***
0815 – 0930	***Overview of Ergonomics: General Principles*** *Aims, Objective and Benefits of Ergonomics ● Definition & Scope of Ergonomics & System of Work ● The Role of The Ergonomist ● Fitting the Job to the Person & the Person to the Job ● Human Characteristics, Capabilities & Limitations ● Human Error ● Teamwork & Ageing ● Interfaces Between Job, Person & Environment ● Human Computer Interaction*
0930 – 0945	*Break*
0945 – 1200	***Overview of Ergonomics : Biological Ergonomics*** *Body Systems - Musculo-Skeletal & Nervous ● Anatomy, Static & Dynamic Anthropometry ● Biomechanics ● Applying Work Physiology – Body Metabolism, Work Capacity & Fatigue ● Static & Dynamic Postures*
1200 – 1230	*Lunch*
1230 – 1430	***Overview of Ergonomics: Psychology*** *Perception of Risk ● Motivation & Behaviour ● Memory ● Signal Detection Theory & Vigilance ● Work Stress – Causes, Preventative & Protective Measures ● Work Organization – Shift Working & Overtime*
1430 – 1445	*Break*
1445 – 1720	***Overview of Ergonomics: Developing an Ergonomic Strategy at Work*** *Culture of an Organization – Commitment & Decision Making ● Macro-Ergonomics & Participatory Ergonomic Teams ● Ergonomics at the Design Stage ● Developing Ergonomics, Professional Ergonomists & Competence*
1720 – 1730	***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*
1730	*End of Day One*

Day 2: ***Monday, 04th of November 2024***

0730 – 0930	***Ergonomics Methods & Techniques: Work Design*** *Task Analysis & Allocation of Functions ● User Trials ● Problem Solving – Scientific Method*
0930 – 0945	*Break*
0945 – 1200	***Ergonomics Methods & Techniques: Ergonomics Risk Assessment*** *Definitions of Hazard & Risk ● Priorities ● Risk Evaluation Quantity & Quality of Risk*
1200 – 1230	*Lunch*
1230 – 1430	***Ergonomics Methods & Techniques: Ergonomics Risk Assessment (cont'd)*** *Assessment Systems ● Overall Ergonomics Approach ● Control Measures Monitoring & Feedback*

1430 – 1445	Break
1445 – 1720	***Ergonomics Methods & Techniques: Measurement & Information Gathering*** *Ergonomics Standards ● Observational Techniques ● Rating Scales, Questionnaires & Checklists ● Use of Models & Simulation*
1720 – 1730	***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*
1730	*End of Day Two*

Day 3: Tuesday, 05th of November 2024

0730 – 0930	***Musculo-Skeletal Disorder: Manual Handling*** *The Nature & Causes of Manual Handling Disorders ● Risk Assessment*
0930 – 0945	Break
0945 – 1200	***Musculo-Skeletal Disorder: Manual Handling (cont'd)*** *Job Design & Training ● Principles of Handling & Preventative & Protective Measures*
1200 – 1230	Lunch
1230 – 1430	***Musculo-Skeletal Disorder: Work Related Upper Limb Disorders (WRULD)*** *The Nature & Causes of WRULD/Repetitive Strain Injuries /Cumulative Disorders*
1430 – 1445	Break
1445 – 1545	***Musculo-Skeletal Disorder: Work Related Upper Limb Disorders (WRULD) (cont'd)*** *Risk Assessment*
1545 – 1720	***Musculo-Skeletal Disorder: Work Related Upper Limb Disorders (WRULD) (cont'd)*** *Principles of Control, Preventive & Protective Measures*
1720 – 1730	***Recap***
1730	*End of Day Three*

Day 4: Wednesday, 06th of November 2024

0730 – 0930	***Workplace, Job & Product Design: Workplace Layout & Equipment Design*** *Principles of Workstation & System Design ● Space & WorkStation Design Principles*
0930 – 0945	Break
0945 – 1200	***Workplace, Job & Product Design: Workplace Layout & Equipment Design (cont'd)*** *Risk to Health (Musculoskeletal Problems, Visual Fatigue, Mental Stress, Requirements for Eye Tests ● Design Consideration for Visual Display Unit (VDU) Stations (Ergonomic Factors, Work Stations, Design of Work & Practice, Carrying out Assessments of Risk at VDU Work Stations)*
1200 – 1230	Lunch
1230 – 1430	***Workplace, Job & Product Design: Controls, Display & Information*** *Visual, Auditory & Other Displays ● Quantitative & Qualitative Information*
1430 – 1445	Break

1445 – 1720	***Workplace, Job & Product Design: Controls, Display & Information (cont'd)*** *Compatibility & Population Stereotypes ● Warnings, Signs & Labels ● Sources & Selection of Data ● Principles of Software Ergonomics*
1720 – 1730	***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*
1730	*End of Day Four*

Day 5: ***Thursday, 07th of November 2024***

0730 – 0830	***Relevant Physical Factors of the Work Environment: Lighting*** *Visual Acuity & Colour Vision ● Lighting Levels, Contrast & Glare ● Reflections & Flicker Fusion*
0830 - 0900	***Relevant Physical Factors of the Work Environment: Noise*** *Noise Induced Hearing Loss ● Distraction, Annoyance & Emergency Signals*
0900 – 0930	***Relevant Physical Factors of the Work Environment: Thermal Environment*** *Body Temperature Regulation & Acclimatisation ● Subjective Assessments – Thermal Comfort & Discomfort*
0930 – 0945	*Break*
0945 – 1100	***Relevant Physical Factors of the Work Environment: Other Considerations*** *Smell, Taste & Tactile Senses ● Vibration-Effects & Subjective Assessments*
1100 – 1215	***Relevant Physical Factors of the Work Environment: Clothing & Protective Equipment*** *Objective & Subjective Effects ● Risk Perception & Wearability ● Design, Style & Fit*
1215 – 1245	*Lunch*
1245 – 1300	***Standards & Social Aspects: Standards*** *ISO Standards ● Sources of Other Standards*
1300 – 1430	***Standards & Social Aspects: Selection & Training*** *Training Needs Analysis ● Testing & Interview Techniques*
1430 - 1445	*Break*
1500 – 1645	***Standards & Social Aspects: Instruction & Supervision*** *Health Information, Legal Instruments ● Supervision & Records ● Measuring Health & Illness*
1645 - 1700	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1700 – 1715	***POST TEST***
1715 – 1730	*Presentation of Course Certificates*
1730	*End of Course*

MOCK Exam

Upon the completion of the course, participants have to sit for a MOCK Examination similar to the exam of the Certification Body through Haward's Portal. Each participant will be given a username and password to log in Haward's Portal for the MOCK exam during the 7 days following the course completion. Each participant has only one trial for the MOCK exam within this 7-day examination window. Hence, you have to prepare yourself very well before starting your MOCK exam as this exam is a simulation to the one of the Certification Body.

Day 6: OHTA BOHS Online Exam (to be scheduled within 30 days of course completion)

0900 - 0915	***OHTA-BOHS Exam Registration/Briefing***
0915 - 1145	***OHTA-BOHS Exam***
1145 - 1200	*Closing Ceremony*
1200	*End of Exam*

Practical Sessions

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

Course Coordinator

Jaryl Castillo, Tel: +974 4423 1327, Email: jaryl@haward.org