

Short Courses – 2022/2023

The Centre for Business Development and Consultancy Services of Kumasi Technical University is pleased to announce the Short Courses for **2022/2023** academic year. The courses will be run from November 2022 to June 2023. The courses are specially designed to equip participants with skills to enable them to solve problems in their areas of endeavors. They are mainly designed for Professionals, Business Owners, Managers, Administrators, Policy Makers, Supervisors, District Assemblies, NGOs, State Agencies, Students and the general public. Certificates of competency will be awarded to trainees or delegates.

CBD 001: Industrial Health, Safety and Loss Prevention

Course Description/Content

Modern organisations are largely responsible to play good role by implementing safety approaches or strategies to ensure positive outcomes or presence of safety in their sociotechnical systems, thus reducing workplace accidents, injuries and illnesses. Nonetheless, lack of cognitive and behavior capabilities of individuals, teams or groups, and poor organisational commitment to ensure safe operations would lead to poor implementation of these approaches. As a result the course has been constructed to equip delegates who wish to occupy roles in occupational safety and health management in organisations or who operate in engineering, operations, nursing, medicine, human resource etc., and intend to be more familiar with principles of occupational health and safety management thus able to support their organisations to achieve their occupational safety and health objectives. Virtually trainees are expected to acquire sufficient knowledge on key responsibilities for workplace safety, industrial processes and operations, statistical data on industrial accidents, health and safety legislations and standards, safety sciences such as fire, noise, ergonomics, toxicology, industrial hygiene, work at height, confined spaces, driving at work, welfare, work related mental health, machine and equipment, radiation, hierarchy of risks control, safety signs and symbols, types of PPE, vehicle movement, alcohol use, slips and trips, occupational health, health surveillance, risk assessment, workplace inspection, accidents investigation, safe storage procedure and emergency response and planning and occupational health and safety management systems such as ISO 45001. Additionally the delivery plan for this course is competency based approach, and trainees would go through practical exercises in risk assessment, accident investigation, emergency response plan, storage of chemicals, and familiarisation with safety systems and equipment in the university training workshops, and buildings. Trainees would go through assignments, individual and group presentations, tests and examinations prior to award of certificate in industrial health safety and loss prevention. The course has been run since 2016, and it has gained recognition amid individuals and organisations in the county. Our delivery excellence is largely dependent on the consultants or experts who have: strong engineering background, occupational health and safety practice, professional occupational health and safety certification, higher education, and their deep understanding in principles of health and safety management across several sectors

including mining and construction, petroleum, health care, aviation, port, educational facilities, processing and manufacturing.

Relevant industry standards: ISO 45001

Objective: to equip participants with the principles of safety and loss prevention thus helping them to prevent industrial risks in working environments

Target Group

- a. Holders of Higher National Diploma or equivalent
- b. Holders of Bachelor degree e.g. BSc, BA, BTech etc.
- c. Holders of Master or Doctor degree

Duration : 56 hours (7 days) equivalent to 6 months

Date : **November 28 –December 7, 2022**

Course Fee : GH¢1,840.00 (**check the last page for payment options**)

Mode of Delivery : Face-to Face /Virtual Teaching/*Weekends

Resource: Trainees are required to have android device and laptop, and internet data

Contact : Engr. Philip Ansah (0548956578) or

Philip.ansah@kstu.edu.gh or filipa300@hotmail.com

*4 weeks

CBD 002: Occupational Health and Safety Engineering Management

Description of course:

The competence, training and education of employees in any organisation play a pivotal role for a successful management of health and safety risks. The course is tailored for all professionals who intend to occupy or assigned at least supervisory role in various industry including mining, oil and gas, construction, health care, academia and consultancy. The course is structured into three (3) stages. The first stage focuses on areas covered in industrial health safety and loss prevention course. The second stage is on sciences such as safety engineering standards, safety equipment and systems design, installation, operation and management. The third stage is on implementation of occupational health and safety (OHS) management including safety culture, safe systems of work, change management, permit/authorization systems,, health and safety policy, managing contractors, monitoring systems,(auditing, etc.), management system models

such as ISO 45001, OHSAS 18001, ILO OHSMS guideline etc. and Resilience Engineering approach. Fundamentally, the course will prepare the professionals to acquire competencies to identify health and safety risks at multiple working sites and apply sound practices including engineering to eliminate or reduce the risks to acceptable levels, to operate and manage safety equipment and systems and finally to design, implement and maintain processes, procedures and methods to meet organisation's health and safety policy and objectives. Additionally the delivery plan for this course is competency based approach, and trainees would go through practical exercises in risk assessment, accident investigation, emergency response plan, storage of chemicals, health and safety policy design, health and safety program design, inspection and familiarisation with safety systems and equipment in the university training workshops, and buildings. Trainees would go through assignments, individual and group presentations, tests and examinations prior to award of certificate in occupational health and safety engineering management. The course has been run since 2016, and it has gained recognition amid individuals and organisations in the county. Our delivery excellence is largely dependent on the consultants who have: strong engineering background, occupational health and safety practice, professional occupational health and safety certification, higher education, and their deep understanding in principles of health and safety management across several sectors including mining and construction, petroleum, health care, aviation, port, educational facilities, processing and manufacturing.

Relevant industry standards: ISO 45001, NFPA OSHA, BSI

Target Group

Holders of Higher National Diploma or equivalent

Holders of Bachelor degree e.g. BSc, BA, BTech etc.

Holders of Master or Doctorate degree

Duration : 112 hours (14 days) equivalent to 12 months

Date : November 28 – December 14

Fees : GhC 2,840.00 (check the last page for payment options)

Mode of Delivery : Face-to Face /Virtual Teaching/**Weekends

Resource: Trainees are required to have android device and laptop, and internet data

Resource person : Engr. Philip Ansah (0548956578),

philip.ansah@kstu.edu.gh or filipa300@hotmail.com

** 8 weeks

CBD 003: Process Safety Engineering Management

Process safety engineering management course consists of framework which will equip trainees to understand any operating systems and processes handling hazardous materials, and establish what is required in place during the design and operation of chemical and energy systems to manage their integrity. The course is more suitable to engineering science and applied technology professionals who wish to work or are working in chemical, petrochemical, oil and gas exploration and production, pharmaceutical plants, food processing, mining and mineral processing, transportation and port industry. This module of process safety is quite unique, because it is structured to aid non-chemical engineering professionals to have better understanding of various process industries, process calculations for energy and material requirement of processes, process equipment design, basic process controls and transport systems (pumps, blowers etc), and process flow diagrams, and piping and instrumentation. Trainees will know some safety sciences including , statistics and history of industrial accidents, safety culture, human factors, safety rules, codes and standards, process safety hierarchy, toxicology and industrial hygiene, source and dispersion models, inherently safety design, fires and explosion, process inerting techniques, confine space entry, safe work practices, permit works, static electricity, ventilation systems, fire equipment and sprinkler systems, relief systems and designs, flare system, scrubber, flash drum, condenser, flame proof equipment, hazard identification (material, process and energy) and evaluation using HAZID, HAZOP , FMEA etc., and incident investigations. Additionally the delivery plan for this course is competency based approach, and trainees would go through assignments, individual and group presentations, tests and examinations prior to award of process safety engineering management. Our delivery excellence is largely dependent on the consultants who have: strong chemical engineering background, process safety practice, higher education, and their deep understanding of principles of process safety management in process industries.

Relevant industry standards: PSM, ASME, NFPA, API etc.

Target group

Holders of at least bachelor's degree in fields such as engineering sciences, biological, chemical and physical sciences

Duration : 160 hours (20) days equivalent to 18 months

Course Fee : GH¢ 3040 for Ghanaians, USD 1040 for foreign nationals (**check the last page for payment options**)

Date : 31st March -2nd July, 2023

Mode of Delivery : Only Weekends (Virtual teaching and Face- to -Face)

Resource: Trainees are required to have android device and laptop, and internet data

Contact person : Eng. Philip Ansah (0548956578)

philip.ansah@kstu.edu.gh or filipa300@hotmail.com

Mode of Payment

Applicants can make payment of the course participation fee through bank or cash. Find below the details for each option:

1. Bank

Bank: Zenith Bank

Account #: 6010511321

Branch: Ahodwo Kumasi

2. Cash

Cash Office

Ground Floor of Block A

KsTU Main Campus

Kumasi

Payment

Prospective trainees are to ensure that their name and title of short course appear on the receipt of payment of course fee, and they are required to forward a copy of the receipt to the Centre for Business Development and Consultancy Services of Kumasi Technical University.