

4.2.13.1 Overview

Industry is increasingly recognising the common philosophy and approaches in the promotion of safety, industrial hygiene and environment protection. Regulatory authorities are requesting the implementation of safety management based on the system-safety approach and risk management methodology to minimise the risk of accidents, health effects and environment damages in the different stages of the product or project life cycle, from business conception, design, building/construction, use/operation to dismantling/decommissioning.

In order for the prevention of accidents, diseases and environment damage to be effective, the hazards have to be identified and assessed and the associated risk evaluated and treated. The programmes must be documented, resourced, planned, monitored and audited. It is a line function to implement management system programmes but such programmes have to be coordinated under the stewardship of appropriate knowledgeable specialists and advisors.

To make full use of the synergy between safety, industrial hygiene and environmental management systems, these advisory specialists require the appropriate level of knowledge in all three areas. They are then equipped to take up the challenge of integrating their management. This is considered to be the most cost-effective way of minimising production loss, preventing accidents and diseases, avoiding damage to property and safeguarding the environment.

The course is designed to provide the candidate with a good understanding of philosophy and approaches in managing safety, industrial hygiene and environmental knowledge so as to optimise globally, rather than locally, on these important topics in order to advise line management on the most productive and appropriate business path forward.

The objective of the course is to develop experts to advise senior management in industry on Safety, Health and Environment (SHE) matters. The MSc holder will be a credible professional in the identification and assessment of hazards as well as risk evaluation and treatment in the management of any SHE programme. The course is conducted by faculty members drawn from the Chemical and Biomolecular Engineering Department and invited lecturers from industries and government ministries.