Module Code	GE-2401			
Module Title	Ethics, Health & Safety			
Degree/Diploma	Bachelor degree			
Type of Module	Breadth			
Modular Credits	2	**Total student Workload**	4	hours/week
		Contact hours	2	hours/week
Prerequisite	Nil			
Anti-requisite	Nil			

Aims

To introduce ethical, health and personal safety issues faced by engineers with particular reference to managing the risks associated at work efficiently.

Learning Outcomes

On successful completion of this module, a student will be expected to be able to:

Lower order :	30%	- understand the concepts of hazard, risk and process safety strategies - assess potential ethical issues present at work
Middle order :	60%	- identify risk levels and acceptability criteria - apply and integrate concepts and techniques learnt to a practicable level
Higher order:	10%	- evaluate and perform case studies involving process safety incidents - communicate effectively within a group to reduce potential risks

Module Contents

- Introduction to ethical principles, professional, dilemmas and responsibilities faced by engineers
- Importance of safety in process plants and analyse possible major sources of potential hazards
- Ways of reducing and mitigating possible risks
- Risks assessment techniques, principles of plant safety, loss prevention principles, process hazards and operability and process safety hazards identification
- Concepts of inherent safety in design and operation and process safety management framework
- Layers of protection analysis
- Introduction to laws and regulations involving health and safety issues
- Perform several case studies relating to process safety incidents

Assessment	Formative assessment	Monthly online multiple choice questions will be used to test and to give feedback for their learning
	Summative assessment	Examination: 60%
		Coursework: 40% - 1 class test (10%) - 3 assignments (10% each)