

Course Code	ME 224
Course Title	Occupational Health and Safety
No. of Credits	2
Pre-requisites	None
Compulsory/Optional	Compulsory for Mechanical Engineering stream
Aim(s):	
To provide the students with an opportunity to be familiar with standard practices and the associated fundamentals in occupational health and safety so that all of them will be able to ensure the safety of the environments that come under their purview.	
Intended Learning Outcomes:	
On successful completion of the course, the students should be able to;	
<ul style="list-style-type: none"> • describe the importance of paying due attention to safety in industrial environment, • conduct a risk assessment associated with industrial activities and suggest risk reduction measures, • describe industrial safety related regulations in Sri Lanka, • describe the components of an occupational health and safety management system. 	
Time Allocation (Hours) : Lectures 22 , Assignments 16 (Notional Hours : 100)	
Course content / Course description :	
<ul style="list-style-type: none"> • Introduction to Industrial safety: Introduction to industrial safety and its importance, Major industrial accidents, Accident investigation, Learning from accidents. • Industrial hazards and risk assessment: Physical, Chemical, Biological and Ergonomic hazards in industry, Risk assessment methods such as hazard and operability analysis, What if analysis, Risk matrix, Fault tree analysis, Safety improvement techniques, Fire safety and emergency management • Occupational Health and Safety Management:ISO 45001- Occupational Health and Safety Management System - Components in ISO 45001 and their practical implementation • OHS regulations:Factory ordinance, ILO regulations and guidelines, OHS regulation implementation agencies in Sri Lanka 	
Recommended Texts(if any) :	
<ul style="list-style-type: none"> • Centre for Chemical Process Safety of the American Institute of Chemical Engineers, (2016). <i>Introduction to Process Safety for Undergraduates and Engineers</i> (1st Edition). Wiley-AIChE Publications. New Jersey, USA. • ISO 45001 Standard (2018). <i>Occupational health and safety</i>. International Organization for Standardization. Geneva Switzerland. 	
Assessment	Percentage Mark
In-course	
Tutorials/ <u>Assignments/Quizzes/Practicals</u>	30
Mid Semester Examination	-
End-semester	70