



UNIVERSITY
of
TECHNOLOGY,
MAURITIUS

School of Sustainable Development And Tourism

BSc. (Hons) Occupational Safety & Health Management Programme

PROGRAMME DOCUMENT

VERSION 3.0

BOSHM 3.0

May 2010

University of Technology, Mauritius

La Tour Koenig, Pointe aux Sables, Mauritius

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Bsc. (Hons) Occupational Safety & Health Management

A. Programme Information

Successful organisations treat their employees as valuable assets and with increasing cut throat competition and emphasis laid on human resource policies and practices, health and safety of employees cannot be ignored for the success of business entities. Employers are being called upon to strengthen the need to better equip themselves with tools that effectively guard their employees against occupational hazards, including psychosocial ones.

Safety & Health officers have seen themselves shouldering various responsibilities with the advent of job reengineering and ICT. They have been called upon to deal with new and more complicated issues regarding health and safety of their colleagues over the years. New challenges are still waiting ahead with amendments having been made to laws, rules and regulations.

B. Programme Aims

This programme aims at those who wish to pursue a career in the field of occupational safety & health. The course will not only provide them with the basics of safety and health, but will also broaden their knowledge and equip them with up to date skills and knowledge that are required to perform their day to day duties. The course will also enable them to better cope with recent changes that have taken place in the field of safety & health. Students will be given the opportunity to analyse situations with respect to safety and health issues and thus take appropriate actions. The course will also provide them with a strong know how as to the legal aspects of safety and health in Mauritius especially with recent amendments brought to existing laws.

C. Programme Objectives

The course has been designed for practitioners and non-practitioners and to provide them with up to date and marketable skills and knowledge that are relevant to a broad spectrum of industries and work environments.

This degree is designed to meet the professional development needs of safety and health professionals by providing the latest OSHM knowledge, techniques, and skills with an understanding that occupational safety and health is an integral part of doing business in the global competitive world of today. Students in this degree program will develop the skills and knowledge needed in the field of safety and health management that will allow them to develop, implement, and maintain an effective safety and health program in today's business and bottom-line oriented companies.

The programme offers 2 exit points at Level 2 and Level 3 which would enable the students to qualify for the award of a Diploma and Degree respectively.

PART I - Regulations

D. General Entry Requirements

As per UTM'S Admissions Regulations, and 'Admission to Programmes of Study at Degree Level'.

E. Programme Entry Requirements

- Either** (i) Cambridge School Certificate, with credits in 5 subjects including English and Mathematics
(ii) at least 3 years relevant work experience in the industry
- Or** (ii) Cambridge Higher School Certificate with at least 2 'A' level subjects.

F. Programme Mode and Duration

Full Time:	2 Years (Diploma)
	3 Years (Degree)
Part Time:	3 Years (Diploma)
	4 1/2 Years(Degree)

G. Teaching and Learning Strategies

Modules will be serviced by full time, part time and local partners. Appropriate case studies will be dealt with. There will also be field visits or plant inspections during the second year of study. A dissertation, under proper supervision will have to be submitted in the final year of study.

H. Student Support and Guidance

There will be an induction session held for students before starting of classes. Resource persons concerned will provide academic tutoring as per existing regulations of the university.

I. Attendance Requirements

As per UTM's Regulations and Policy.

J. Credit System

1 module = 3 credits

K. Student Progress and Assessment

For the award of the Diploma & Degree, all modules must be passed overall with passes in the examinations, coursework and other forms of assessment.

All modules will carry 100 marks and will be assessed as follows (unless otherwise specified):

Written examinations up to 3-hours' duration and continuous assessment carrying up to 30% of total marks.

Continuous assessment can be based on field visits, seminars, assignments and/or class tests.

Maximum marks attainable:

Level 1	1200
Level 2	1200
Level 3	1200

Grading

Grade	Marks x (%)
A	$x \geq 70$
A-	$65 \leq x < 70$
B	$60 \leq x < 65$
B-	$55 \leq x < 60$
C	$50 \leq x < 55$
C-	$45 \leq x < 50$
D	$40 \leq x < 45$
F	$x < 40$
A-D	Pass
F	Fail

L. Evaluation of Performance

The percentage mark at Level 1 contributes a 20 % weighting towards the Degree classification.

The percentage mark at Level 2 contributes a 30% weighting towards the Degree classification.

The percentage mark at Level 3 contributes a 50% weighting towards the Degree classification.

M. Award Classification

Overall weighted mark x (%)

Classification

> 70	1st Class Honours
$60 \leq y < 70$	2 nd Class 1st Division Honours
$50 \leq y < 60$	2 nd Class 2 nd Division Honours
$45 \leq y < 50$	3rd Class Honours
$40 \leq y < 45$	Pass Degree
< 40	No Award

***For Diploma award, existing UTM's award classifications will apply.**

***Student will qualify for an ordinary degree in the advent of :**

- Failure and/or resubmission of final year dissertation.
- Non submission of final year dissertation for no valid reasons and/or not supported with relevant documents.

N. Programme Organisation and Management

Programme Director and Coordinator: Mrs. S D Lukea Bhiwajee

Contact Details:

- Room: F 0.06
- Telephone Number: 234 7624 (Ext. 244)
- Email: sbhiwajee@umail.utm.ac.mu

Part II - Programme Structure

O. BSc.(Hons) Occupational Safety and Health Management– Full Time (Version 3.0)

YEAR 1									
Semester 1				Semester 2					
Code	Modules	Hrs/ Wk		Credits	Code	Modules	Hrs/Wk		Credits
		L	P				L	P	
HRMT 1205	<i>Introduction to Industrial Psychology</i>	3	+0	3	STAT 1101	<i>Business Statistics</i>	3	+0	3
COMM 1101	<i>Business Communication</i>	3	+0	3	SCI 1101	<i>Chemistry Essentials for S&H</i>	3	+0	3
SCI 1201	<i>Biology Essentials for S & H</i>	3	+0	3	LWS 1201	<i>Public Health & Health, Safety Welfare legislation</i>	3	+0	3
MBUS 1102	<i>Principles & Practice of Management</i>	3	+0	3	SCI 1301	<i>Physics Essentials for S&H</i>	3	+0	3
OSHM 1109	<i>Introduction to occupational Safety & Health</i>	3	+0	3	BCON 1102	<i>Introduction to Health Economics</i>	3	+0	3
LLAW 1101	<i>Introduction to Law & legal methods</i>	3	+0	3	OSHM 1208	<i>Occupational Health</i>	3	+0	3
→ Start of Level 1				Finish of Level 1 →					
YEAR 2									
Semester 1				Semester 2					
Code	Modules	Hrs/ Wk		Credits	Code	Modules	Hrs/Wk		Credits
		L	P				L	P	
LWS 1101	<i>Labour Laws</i>	3	+0	3	OSHM 2113	<i>Industrial Toxicology & Chemical Safety</i>	2	+1	3
OSHM 2111	<i>Safety Engineering I</i>	2	+1	3	ENVT 2103	<i>Environmental Management</i>	2	+1	3
OSHM 2209	<i>Industrial Hygiene I</i>	2	+1	3	OSHM 2114	<i>Fire Safety</i>	2	+1	3
OPS 2109	<i>Risk Management for Safety & Health</i>	2	+1	3	OSHM 2211	<i>Industrial Hygiene II</i>	2	+1	3
MGPL 2103	<i>Management of Human Resources</i>	3	+0	3	OSHM 2115	<i>Accident Investigation</i>	2	+1	3
OSHM 2210	<i>Ergonomics at work</i>	3	+0	3	OSHM 2212	<i>Occupational Rehabilitation & Compensation</i>	3	+0	3
Start of Level 2 →				Finish of Level 2 →					

YEAR 3

Semester 1				Semester 2			
Code	Modules	Hrs/Wk L P	Credits	Code	Modules	Hrs/Wk L P	Credits
<i>HRMT 3204</i>	<i>Sociology Of Work</i>	<i>3 + 0</i>	<i>3</i>	<i>OPS 3205</i>	<i>Project Management</i>	<i>3 + 0</i>	<i>3</i>
<i>STAT 3303</i>	<i>Research Methods</i>	<i>3 + 0</i>	<i>3</i>	<i>OSHM 3116</i>	<i>Safety Engineering II</i>	<i>2 + 1</i>	<i>3</i>
<i>SSDV 3203</i>	<i>Training & Educating Workers</i>	<i>3 + 0</i>	<i>3</i>	<i>OSHM 3117</i>	<i>Hazard Prevention & Strategy</i>	<i>3 + 0</i>	<i>3</i>
<i>ENVT 3201</i>	<i>Waste Management</i>	<i>2 + 1</i>	<i>3</i>	<i>OPS 3603</i>	<i>Maintenance Strategy</i>	<i>2 + 1</i>	<i>3</i>
<i>LWS 2102</i>	<i>Employment Law</i>	<i>3 + 0</i>	<i>3</i>	<i>DISS 3000</i>	<i>Dissertation</i>		<i>9</i>
→ <i>Start of Level 3</i>				<i>Finish of Level 3</i> →			

P. BSc.(Hons) Occupational Safety and Health Management – Part Time (Version 3.0)

YEAR 1									
Semester 1				Semester 2					
Code	Modules	Hrs/Wk		Credits	Code	Modules	Hrs/Wk		Credits
		L	P				L	P	
HRMT 1205	Introduction to Industrial Psychology	3	0	3	OSHM 1109	Introduction to occupational Safety & Health	3	0	3
COMM1101	Business Communication	3	0	3	LLAW 1101	Introduction to Law & legal methods	3	0	3
SCI 1201	Biology Essentials for S & H	3	0	3	STAT 1101	Business Statistics	3	0	3
MBUS 1102	Principles & Practice of Management	3	0	3	SCI 1101	Chemistry Essentials for S & H	3	0	3
→ Start of Level 1									
YEAR 2									
Semester 1				Semester 2					
Code	Modules	Hrs/Wk		Credits	Code	Modules	Hrs/Wk		Credits
		L	P				L	P	
LWS 1201	Public Health & Health, Safety, Welfare legislation	3	0	3	LWS 1101	Labour Laws	3	0	3
SCI 1301	Physics Essentials for S & H	3	0	3	OSHM 2111	Safety Engineering I	2	1	3
BCON 1102	Introduction to Health Economics	3	0	3	OSHM 2209	Industrial Hygiene I	2	1	3
OSHM 1208	Occupational Health	3	0	3	OPS 2109	Risk Management for Safety & Health	2	1	3
Finish of Level 1 →				→ Start of Level 2					
YEAR 3									
Semester 1				Semester 2					
Code	Modules	Hrs/Wk		Credits	Code	Modules	Hrs/Wk		Credits
		L	P				L	P	
MGPL 2103	Management of Human Resources	3	0	3	OSHM 2114	Fire Safety	2	1	3
OSHM 2210	Ergonomics at work	3	0	3	OSHM 2211	Industrial Hygiene II	2	1	3
OSHM 2113	Industrial Toxicology & Chemical Safety	2	1	3	OSHM 2115	Accident Investigation	2	1	3
ENVT 2103	Environmental Management	2	1	3	OSHM 2212	Occupational Rehabilitation & Compensation	3	0	3
Finish of Level 2 →									

YEAR 4

Semester 1				Semester 2			
Code	Core Modules	Hrs/Wk L P	Credits	Code	Core Modules	Hrs/Wk L P	Credits
HRMT 3204	Sociology Of Work	3 + 0	3	LWS 2102	Employment Law	3 + 0	3
STAT 3303	Research Methods	3 + 0	3	OPS 3205	Project Management	3 + 0	3
SSDV 3203	Training & Educating Workers	3 + 0	3	OSHM 3116	Safety Engineering II	2 + 1	3
ENVT 3201	Waste Management	2 + 1	3	OSHM 3117	Hazard Prvention & Strategy	3 + 0	3
→ Start of Level 3							

YEAR 5

Semester 1			
Code	Core Modules	Hrs/Wk L P	Credits
OPS 3603	Maintenance Strategy	2 + 1	3
DISS 3000	Dissertation		9
Finish of Level3 →			

Q. MODULE OUTLINE

HRMT 1205 : Introduction to Industrial Psychology

- Basics of Industrial Psychology
- important aspects - the individual: values, attitudes and job satisfaction
- basic motivational concepts; the group and foundations of group behaviour
- Communication
- understanding work teams
- Leadership: power and politics
- conflict
- negotiation and inter group behaviour
- organisational change and stress management

COMM 1101 : Business Communication

- Importance of communicating effectively
- Internal & external Communication
- Verbal & non Verbal communication
- Process of communication
- Communication Barriers
- Intercultural communication
- Teamwork.
- Conflict & communication
- Writing for business audiences – letters, reports, memorandum, e-communication
- Interviews – preparing for job interviews, letter of application, curriculum vitae writing
- Grooming
- Customer Service and Communication

SCI 1201 : Biology Essentials for S & H

- Introduction to the basic concepts of life and ecology with emphasis on health and safety aspects.
- Evolution of biological systems. Taxonomy of biological elements
- Introducing human anatomy and physiology: cell structure, sensory organs and systems of respiration, blood circulation, digestion and excretion.
- The immune, respiratory, endocrine, nervous, cardiovascular, musculo-skeletal systems.
- Basic microbiology and infectious diseases.
- Environmental pollution (air, water, solid waste, odour, noise).

MBUS 1102 : Principles & Practice of Management

- Definition, Meaning & Scope of Management
- Brief overview of Management Approaches
- Roles & functions of Managers
- Understanding & Managing Business Environment
- Decision making
- Motivation
- Leadership
- Teams & team building
- Managing for sustainability – managerial behaviour & effectiveness
- Perception & communications
- Values, Ethics & Professionalism
- Corporate Social Responsibility

OSHM 1109 : Introduction to Occupational Safety & Health

- Occupational Safety & health : Background & History
- Industrial Accidents : Definition, Definition & Meaning, Types , Causes
- Introduction to the types of occupational hazards: Biological, Chemical, Physical & Ergonomics
- Occupational Illnesses
- Workplace Violence
- Employer's Supervisor's and Management's role in H& S
- H& S: whose responsibility?
- Case Studies

LLAW 1101: Introduction to Law & Legal Methods

- Introduction to Law
- Ideas and functions of Law
- Nature of constitutional and administrative law
- Constitutional foundations of the powers of the court, statutory interpretation, arbitration and the hearing tribunal
- the law of contract
- the law of agency; Distinction between Public and Private Law
- Criminal and Civil Law
- Common Law and Civil Law Systems
- Case Law Techniques; Statutory Interpretation

STAT 1101 : Business Statistics

- Descriptive Statistics and graphical summaries
- Probability theory
- Discrete and Continuous random variables and probability distributions
- Sampling theory: The rationale for sampling and sampling techniques
- The Central Limit Theorem, Sampling distribution of sample means
- Confidence intervals for sample mean
- Hypothesis Testing: Significance test for a population mean and two population means
- Chi Square Test
- Correlation Analysis and Regression Analysis
- Analysis of Variance.

SCI 1101 : Chemistry Essentials for S & H

- A review on the principles of physical chemistry: states of matter, changes of state, crystal lattice, chemical equilibrium and kinetics, thermochemistry and introductory thermodynamics, electrochemistry.
- Principles of inorganic chemistry: Atomic structure and periodicity, modern electronic theory of atoms, chemical bonding, the chemistry of selected metals and non-metals, radioactivity.
- Essentials of organic chemistry: nomenclature and chemistry of the function groups. Applications of chemistry: an introduction to analytical chemistry, gas chromatography and biochemistry - metabolism of lipids, carbohydrates and proteins.

LWS 1201 : Public Health & Health Safety Welfare Legislation

- Introduction to Law
- Ideas and functions of Law
- Present Legislation, Scope of the Act (1980)
- Development of Occupational Health and Safety Law
- General Duties under the act. Environment Studies
- Offences, Penalties and Legal Proceedings
- Insurance: Effect of Insurance on health and safety at work and employer's liability insurance
- Comparative Health and Safety Legislation
- Public Health Act (1925): Scope, Importance & relation with H& S
- Restrictions on Tobacco & Alcohol Products 2008(Regulations GN 263)
- HIV/Aids Act (2006).

SCI 1301 : Physics Essentials for S & H

- Foundation of basic physics, with emphasis on Newtonian mechanics, conservation of energy, Waves: propagation of sound, light and other electromagnetic radiation (ionising and non-ionising), that underlines occupational health and safety aspects.
- Heat and thermodynamics: Principles of thermometry; measurement of high and low temperature; zeroth law of thermodynamics, kinetic theory of ideal gas; first and second laws of thermodynamics; entropy; black body radiation.
- Applications of physics: production of X-rays and ultrasounds, use of magnetic resonance as imaging technique, the mobile phone network.

BCON 1102 : Introduction to Health Economics

- Introduction to Health Economics
- Human Capital: A Health Economics Perspective
- Resource gap and Scarcity in Health Care
- External costs of poor health
- Demand for Health & Safety
- Health Production and Costs, Health Insurance & Market Failure
- Economics behind Health Promotions
- Country Experiences: Health & Safety Policies

OSHM 1208 : Occupational Health

- Introduction to the effects of work on health and health on work: what is occupational health, aims, purpose, practice
- biological hazards,(including brief on food hygiene)
- Chemical Hazards (Occupational Toxicology)
- Psychosocial Hazards, (Stress, Tobacco, Alcohol , Violence at work, HIV Aids)
- Physical Hazards (Radiation, Noise, Heat& Cold, Compressed air & diving)
- Occupational Diseases by systems :Musculoskeletal problems, Occupational skin diseases , Eye disorders , Occupational Lung disorders
- Occupational cancers
- Prevention of occupational ill-health

LWS 1101 : Labour Laws

- Historical Developments
- Sources of Labour Laws
- Employment contracts
- Expressed and Implied terms of Contracts

- Breach of Contract of Employment
- Termination of Contract of Employment
- Wages & Conditions of Employment
- Workmen's Compensation Act 1931
- Regulatory Bodies & courts

OSHM 2111 : Safety Engineering I

- Electricity- AC & DC, Sources of electricity, Distribution of electricity
- Hazard of electricity , Effect of current on the body
- Electricity at Work Regulations 2009
- Ohms law (Simple calculation involving current, voltage & resistance)
- Single phase and 3 phase current
- Safe Socket, plugs, and wiring, Safe Distances
- Earthing and ELCB, IEE Regulations
- Commissioning & Testing of installation and equipment
- Portable tools and extension
- Safety measures, Log Out & Tag out system
- Domestic & Industrial distribution
- What are & Safe Practices in Oxyacetylene and electrical arc welding , Pressure vessels , Boilers, Air receivers , Cranes and lifting machines
- Passengers lift and escalators
- Health and safety in workshop
- Piping- Color coding
- Conveyor belt – In running nip
- Hydraulic- Press , brakes etc

OSHM 2209 : Industrial Hygiene I

- Occupational Hygiene Standards. Hazard Control. Monitoring of Air Contaminants : Environmental & Personal Monitoring.
- Airborne Emissions : Aerosols, mists & fog, fumes, dusts, smoke & fibres. Respiratory Protective Devices.
- Principles of Sampling, Measuring & Monitoring of Environmental Factors. Analytical Methods used in Industrial Hygiene
- The Aural Environment : Noise and Hearing. Principles of Noise & Vibration Control. NIHL. Noise Measurements. Hearing Conservation Programme. Ear Protection.
- The Thermal Environment : Effects of Heat & Cold Stress. Indices of Thermal Stress. Psychrometric Charts. Assessment of thermal environment.
- Physical hazards – Ionising (alpha, beta, gamma, x – rays) & Non-ionising (Microwaves, Lasers) Radiation.
- Microbiological Hazards – Infectious Diseases at work.

OPS 2109 : Risk Management for Safety and Health

- Steps in risk management process, identifying risks, analyse risks, evaluate risks; treat risks, monitor and review.
- Risk identification techniques including checklists, judgments based on experience and records, flow charts, brainstorming, systems analysis, scenario analysis, and systems engineering techniques,
- Sources of data, Analytical techniques such as HAZOP , FMEA, hazard indices, fault trees, event trees, reliability analysis, probability calculations

MGPL 2103 : Management of Human Resources

- The importance of people at work
- The evolution of the field of people management – Pre Scientific, Scientific, Human Relations Approach
- Definition, Role , Scope of HRM
- HRM functions : HRP, Recruitment, Selection, Training & Development, Performance Management

- Managing Diversity and Culture
- Employee Relations
- Strategic HRM
- Sustainable HRM
- Case Studies

OSHM 2210 : Ergonomics at work

- Principles of Anthropometry and Biomechanics. Ergonomic Hazards : Physical Factors.
- Principles of Manual Handling. Main Injuries from Manual Handling : Musculo-Skeletal Disorders (MSD)
- Assessing of Risk from Manual Handling Operations. Manual Handling Assessment Tools: NIOSH Lifting Equation, QEC, OWAS, RULA and MAC.
- Application of Ergonomic Principles in the Design of Tools, Equipment and Working Environment. Job Safety Analysis
- Use of Display Screen Equipment: Musculoskeletal Injury & Discomfort – RSI (Repetitive Strain Injuries). Assessing of Risk from Working with VDU
- Environmental & Psycho-social Factors. Assessing the Working Environment. Fatigue, Boredom, Work Organisation, Night Work and Shift Work. Health Risks from Hand-Arm Vibration
- Control Measures: Automation and Mechanical Assistance. Making Use of Lifting and Handling Aids: conveyors, slides/chutes/rollers, powered trucks and trolleys, mechanical hoists and vacuum-lifting devices.
- Ergonomics Checklist : Practical Solutions for Improving Safety, Health and Working Environment
- Case studies

OSHM 2113 : Industrial Toxicology & Chemical Hazards

- Introduction to Industrial Toxicology
- Toxic substances : risks involved, handling, storing, labelling, precautionary measures.
- Principles of Industrial Toxicology – Routes of entry and target organs. Dosage-response relationships. Toxicity Indices. Acute (Short-term exposure) & Chronic (Long-term exposure) Health Effects. Storage of Toxicants in tissues (Liver & kidney). Routes of Excretion. Classification of Toxic materials
- Chemical Hazards in the working environment
- Chemical hazards Material Safety Data Sheets. Pesticides & Solvents.
- Assessment of risks associated with the use of Hazardous substances
- Control of substances hazardous to health
- Dangerous Chemicals Act

ENVT 2103 : Environmental Management

- An introduction to environmental management (systems and approaches to meet the challenges of natural resource protection and conservation
- Contributions that can be made to the sustainability development agenda;
- General principles of sustainable environmental management.
- Prerequisites of sustainability
- Environmental Impact Assessment Techniques
- CDM Concepts
- Limitations and recent developments
- Environmental audit.
- Biodiversity
- Environment Protection Act 2002
- National Environmental Action Plan
- National Environment Strategies
- National Environment Policy
- ISO series
- Case studies

OSHM 2114 : Fire Safety

- Chemistry of fire
- Heat Transmission
- Flash point, ignition temperature and flammable range
- Causes of fire
- Methods of fire extinguishment
- Class of fire
- Firefighting equipment, fire extinguisher, hose reels, hydrants, sprinkler systems
- Fire Detection equipment, Heat detectors, smoke detectors,
- Fire alarms system- call point, siren and alarm panel
- Means of escape- corridor, passageways, staircase,
- Drills
- Fire notice/ instructions
- Fire certificate
- Storage of Flammable substances

OSHM 2211 : Industrial Hygiene II

- Engineering Control Measures against Air Contaminants: Industrial Ventilation Systems. Components of Dilution & Local Exhaust Ventilation. Indoor Air Quality
- Notifiable Occupational Diseases. Pre-employment Medical Screening. Wellness Programme at Work. Health Surveillance. Biological Monitoring. Psychosocial Hazards. Occupational Stress.
- The Visual Environment : Industrial Lighting. Interior light design. Standards of Service Illuminance. Design of VDU workstations.
- Ergonomic Factors : Principles of Safe Manual Handling. Use of Lifting & Handling Aids. Assessment of Manual Handling Operations.
- Personal Protective Equipment & Clothing : From head to toes. PPE user's training programme. Use & limitations of safety devices. Equipment Standards. Last resort control measure

OSHM 2115 : Accident Investigation

- Introduction to Accident Causation & Prevention Techniques/ Models
- Safety and Health Programs; Motivating Safety and Health
- Accident/Incident Investigation
- Job Safety/Hazard Analysis
- Safe Operating Procedures (SOPs) and Job Safety Observation
- Accident/Incident Analysis and Root Cause Analysis
- Causal Factor, Safety and Health Audits, Survey, Inspection and Using Safety Consultants
- Safety and Health Training; Fleet Safety, Preventive Maintenance, and Special Emphasis Programs
- Analyzing Accident Data and Prevention &; Controls and Personal Protective Equipment

OSHM 2212 : Occupational Rehabilitation & Compensation

- Introduction to the concepts of rehabilitation & compensation
- the role of the S & H Officer in Occupational Rehabilitation
- Legislation Workmen's Compensation Act 1931
- National Pension's Act (1976)
- Occupational Accidents, Diseases & prevention
- Historical Background to Workmen's Compensation and its practice
- Ability and medical examination of workers
- Disability & methods of assessment and compensation for musculoskeletal system, hearing apparatus and respiratory system
- Means and types of rehabilitation(medical and social)
- Roles of various existing bodies with respect to compensation and rehabilitation
- Rehabilitation and Occupational Therapy and Services

- Psychosocial hazards and Rehabilitation in the Mauritian context
- Case studies

HRMT 3204 : Sociology of Work

- Critical examination of changing nature of work in Mauritius (agriculture to manufacturing, service)
- Changes in variety and pattern of employment relation, hours of work, patterns of reward and remuneration
- Employee representation and forms of employee participation
- effects of social, demographic and macro economics forces such (industrialisation and technological advances) on labour market
- Gender and ethnicity
- Patterns of education and skill formation, globalisation etc
- Families' adaptation to these changes; Future shape of employment in Mauritius

SAT 3303 : Research Methods

- Introduction to survey research methodology: The research process, Formulating the research problem, Research questions and research objectives
- Quantitative and Qualitative Research Design: Types of samples and sampling methods
- Data collection methods
- Questionnaire Design
- Ethical consideration in Research
- Data analysis: Introduction to SPSS: Entering data, Descriptive statistics and graphs, Hypothesis testing
- Choosing appropriate statistical tests
- Writing up research results: Structure of a report/dissertation
- Referencing.

SSDV 3203 : Training & Educating Workers

- What is training
- Benefits of training
- The importance of training & education for Safety & Health
- Training Cycle
- Training Methods & techniques
- E training and the use of technology in training
- Andragogy
- The adult learning process
- Learning Theories
- Programme Design
- Contemporary Issues in training

ENVT 3201 : Waste Management

- Introduction to Wastewater Management
- Waste as an environmental issue
- Industrial Wastewater Treatment Technologies
- Sludge Processing and Disposal
- Waste minimisation: Recycling and Reuse
- Management of Industrial Solid Wastes; Processing and Resource Recovery
- Ultimate Disposal of Solid and Hazardous Wastes: Landfills
- Health & Safety Issues in H& S

LWS 2102 : Employment Law

- History & Development of Employment law in Mauritius
- Nature & Scope of Employment Law
- The role of the state
- Method of Settling Industrial Disputes

- Industrial Democracy, productivity norms and targets.
- Industrial Discontent: Causes, Symptoms, Consequences and Strikes
- Law relating to Trade Unions (Registration, Recognition, Deregistration)
- Comparative analysis on theory and practice of collective bargaining.
- Law relating to employer organisations- Employee Relations Act 2008
- Law relating to collective bargaining
- Trade Unions and Employer Organisations.
- Current Trends in Mauritius & Case Studies

OPS 3205 : Project Management

- Introduction, Philosophy & Concepts
- Project Lifecycle
- Project Selection
- Planning Fundamentals
- Network Scheduling
- PERT & CPM
- Resource Planning & Allocation
- Cost Estimating & budgeting
- Scope Management
- Managing Risks in Projects
- Project Control, Evaluation, Reporting & Termination
- Project Organisation structure & Integration
- Project Quality Management
- Project Communication
- Teams & Leadership

OSHM 3116 : Safety Engineering II

- Overview of the practice and the role of occupational safety and health practitioners in construction industry;
- Applied discussions: H&S aspects and other environmental aspects
- Safety aspects of equipments – scaffoldings, lifts, cranes, conveyor belts, etc
- Specifications for Construction Works
- Demolition works: disposal of wastes, hazardous wastes removal and disposal
- Pre-construction safety measures: storage of materials and dangerous products, formwork, scaffoldings, ladders, etc
- During Construction works: safety measures, labour regulations: safety harness, care for passers-by; security nets, etc
- Post-construction safety measures: formwork removal, signs of possible collapse, swelling, disposal of wastes, etc
- Steel structure constructions: specific precautions
- Building Act: regulatory distances; depth of septic tanks, care of water table, etc
- Aspects of safety measures during Excavation works and in trenches – slip line, shuttering, water table effect, effect of traffic, effect on adjacent buildings, etc
- Specifications for road works;
- Road Act 1982
- Road Traffic Act 1963
- Case Studies

OSHM 3117 : Hazard Prevention & Strategy

- Classification & Identification of Hazards
- Permit to work
- Transport Safety
- Confined spaces & Precautionary measures
- Mobile Plant

- Fixed Registrable Plant
- Health & Safety Management Systems
- ILO OHS 2001
- OHSAS 18001
- Use of Accident, Injury and Ill health data
- Case Studies

OPS 3603 : Maintenance Strategy

- The purpose of Maintenance within an organisation
- Historical developments of principles and techniques of maintenance
- Formulation of a structured and all embracing strategy for maintaining complex industrial plants, analytical techniques in solving practical maintenance problems (statistical analysis of failure data, system availability assessment, critical path analysis)
- Basic management principles and techniques
- Mechanical Safety : Properties of engineering materials and testing
- Corrosion / Degradation and their effects on materials
- Modern condition monitoring techniques
- Formulation of maintenance strategies

DISS 3000 : Dissertation

- A 10,000-12,000 words dissertation will have to be submitted at the end of the semester. The work submitted should conform to the Undergraduate Dissertation Guidelines.