MSc Building Services Engineering - E507

1. Aim

The success of the building industry depends on its ability to meet the requirements on issues such as energy management, environment, emissions, optimisation as well as use of green energies and health & safety. This programme is aimed at engineers and provides a sound knowledge of the important engineering principles that are required in the building services/Integrated Resort Scheme (IRS) or Hospitality sectors.

2. Objectives

Building Services Engineering involves the specification, design, installation and management of all the engineering services associated with the built environment. This programme is specifically useful to develop technical understanding and expertise across the multi disciplines of building services engineering such as air conditioning, ventilation, hot and cold water reticulation, sewage reticulation, drainage system, fire fighting, electrical installation, lifts, escalators, alarm systems and energy management systems among others. Environmental and safety issues form the key parameters for each module.

3. General Entry Requirements

Successful completion of an undergraduate degree with

- at least a Second Class or 50%, whichever is applicable or
- a GPA not less than 2.5 out of 4 or equivalent, from a recognised higher education institution.

OR alternative qualifications acceptable to the University of Mauritius.

4. Programme Requirements

At least a second class honours degree in any engineering discipline with GPA not less than 2.5 or alternative qualifications acceptable to the University of Mauritius.
Preference will be given to candidates having at least two years of relevant work experience.

5. General and Programme Requirements - Special Cases

The following may be deemed to have satisfied the General and Programme requirements for admission:

(i) Applicants who do not satisfy any of the requirements as per Regulations 3 and 4 above but who submit satisfactory evidence of having passed examinations which are deemed by the Senate to be equivalent to any of those listed.

(ii) Applicants who do not satisfy any of the requirements as per Regulations 3 and 4 above but who in the opinion of Senate submit satisfactory evidence of the capacity and attainments requisite to enable them to pursue the programme proposed.

(iii) Applicants who hold a full practicing professional engineering qualification obtained by examination.

6. Programme Duration

The Programme will be offered on a part-time basis. The duration of the Graduate Programme should normally not exceed 4 years (8 semesters).

	Normal	**Maximum**
Master's Degree:	4 Semesters	8 Semesters
Postgraduate Diploma:	4 Semesters	8 Semesters

7. Credits per Semester: Minimum 3 credits subject to Regulation 6.

8. Minimum Credits Required for the Award of

Master's Degree: 36
Postgraduate Diploma: 24

Breakdown as follows:

	Core Taught (Minimum)	Project	Elective/Optional Modules
Master's Degree :	21 credits	9 credits	6 credits
Postgraduate Diploma:	21 credits		3 credits

9. Assessment

Each module will carry 100 marks and will be assessed as follows (unless otherwise specified):

- Written examination of 3-hour duration and continuous assessment of 10% to 30% of total marks.
- Continuous assessment can be based on laboratory work, assignments and at least one class test.
- An overall of 40% for combined Continuous Assessment and written Examination components would be required to pass the module. All modules carry equal weighting.
- Some modules may be based only on continuous assessment, which should consist of at least a class test and industry based project.

Submission Deadlines for Dissertation:

(Please refer to Regulations 7.4.4.2-
http://www.uom.ac.mu/ABOUTUS/REGULATIONS/Chap7.pdf)

10. Plan of Study

Students are required to submit at the end of Semester I a Plan of Study for their whole Programme of Studies, indicating the list of elective modules and in which semester, each of them will be taken.

The University reserves the right not to offer a given elective module if the critical number of students is not attained and/or for reasons of resource constraints.

11. List of Modules

Code	Module Name	Hrs/Wk L+P	Credits
CORE MODULES			
MECH 6202	Fluid Systems Engineering	3+0	3
ELEC 6104	Electrical Services for Building	3+0	3
MECH 6105	Heating, Ventilation and Air Conditioning (HVAC)	3+0	3
ENGG 6101	Principle of Project Management	3+0	3
ENGG 6410	Asset Management	3+0	3
MECH 6410	Sustainable Energy Management	3+0	3
MECH 6106	Legal aspects of Building Services Engineering	3+0	3
PROJECT			
ENGG 6000	Project	-	9
ELECTIVES			
MECH 6204	Occupational Health and Safety	3+0	3
MECH 6205	Managing People in Engineering Activities	3+0	3
ENGG 6305	Procurement Management	3+0	3

Students have to complete ALL core taught modules, the project work and ANY two (2) electives.

12. Programme Plan

YEAR 1

Semester 1				Semester 2			
Code	**Module Name**	**Hrs/Wk L+P**	**Credits**	**Code**	**Module Name**	**Hrs/Wk L+P**	**Credits**
CORE				**CORE**			
ENGG 6101	Principles of Project Management	3+0	3	*MECH 6202	Fluid Systems Engineering	3+0	3
*ELEC 6104	Electrical Services for Building	3+0	3	ENGG 6410	Asset Management	3+0	3

YEAR 2

Semester 1				Semester 2			
Code	**Module Name**	**Hrs/Wk L+P**	**Credits**	**Code**	**Module Name**	**Hrs/Wk L+P**	**Credits**
CORE				**CORE**			
ENGG 6000	Project		-	ENGG 6000	Project	-	9
MECH 6106	Legal aspect of Building Services Engineering		3	**Two Elective Modules from**			
*MECH 6105	HVAC	3+0	3	MECH 6204	Occupational Health and Safety	3+0	3
MECH 6410	Sustainable Energy Management	3+0		MECH 6205	Managing People in Engineering Activities	3+0	3
				ENGG 6305	Procurement Management	3+0	3

* Continuous assessment only

Each module will consist of 45 contact hours (this includes lectures, tutorials, seminars, workshops, external visits, etc.). The total contact (taught) hours of the course therefore will be 405 hours. The Research Project will involve 180 working hours including direct supervision by a member of academic staff and/or an external supervisor.

A minimum of 6 contact hours is scheduled per week. However, candidates are expected to attend on a daily basis, for a period of two to three weeks, normally after 4 p.m., those modules which are taught by visiting lecturers.

The Faculty reserves the right to change the order in which the modules are offered.