# FACULTY OF ENGINEERING

## DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

## STRUCTURAL AND ARCHITECTURAL ENGINEERING

Bachelor of Engineering with Honours in Structural and Architectural Engineering Bachelor of Engineering in Structural and Architectural Engineering Diploma of Higher Education in Structural and Architectural Engineering Certificate of Higher Education in Structural and Architectural Engineering

These regulations are to be read in conjunction with <u>General Academic Regulations –</u> <u>Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u>.

### Status of the Programmes

1. All students are normally admitted in the first instance as potential Honours students. Transfer to the MEng in Structural and Architectural Engineering is possible prior to the fourth year of study, subject to satisfying the appropriate progress regulations.

### Mode of Study

2. The programmes are available by full-time study only.

### Curriculum

3. **First Year** - All students shall undertake modules amounting to 120 credits as follows:

Module Code	Module Title	Level	Credits
AB110	Cultural Studies 1	1	20
CL111	Structural Mechanics and Materials 1	1	20
CL119	Introduction to Geology and Soil Mechanics	1	20
CL117	Basic Mechanics	1	10
ME101	Heat and Flow 1	1	10
MM115	Mathematics 1D	1	20
	Elective Module(s)		20

### Compulsory Modules

4. **Second Year** - All students shall undertake modules amounting to 120 credits as follows:

### **Compulsory Modules**

Module Code	Module Title	Level	Credits
AB211	Cultural Studies 2	2	20

CL207	Structural Mechanics and Materials 2	2	20
CL217	Soil Mechanics	2	20
CL216	Hydraulics and Hydrology	2	20
16293	Environmental Engineering Science	2	10
16294	Energy Systems 1	2	10
MM215	Mathematics 2D	2	20

### 5. Third Year - All students shall undertake modules amounting to 120 credits as follows:

### **Compulsory Modules**

Module Code	Module Title	Level	Credits
AB314	Cultural Studies 3	3	20
CL313	Structural Engineering 1	3	20
CL314	Geotechnical Engineering 1	3	20
CL329	Engineering Mathematics	3	20
CL324	Surveying and Building Design	3	20
16387	Environmental Engineering Science 2	3	10
16390	Energy Systems 2	3	10

6. **Fourth Year** - All students shall undertake modules amounting to 120 credits as follows:

### Compulsory Modules

Module Code	Module Title	Level	Credits
16469	Low Energy Building Design	4	20
CL434	Individual Project	4	20
CL418	Structural Engineering 2	4	20
CL419	Geotechnical Engineering 2	4	20
CL435	Prestressed Concrete, Composite Materials and Structural Stability	4	10
CL438	Project Planning	4	10

### **Optional Modules**

20 credits from the list below:

Module Code	Module Title	Level	Credits
CL436	Transport Planning	4	10
CL437	Project Analysis	4	10
CL428	Architectural Engineering Design Project	4	10
16468	Acoustics	4	10
ME404	Energy Systems Modelling	4	10

Exceptionally, such other modules totalling no more than 20 credits as approved by the Programme Leader.

### Progress

- 7. In order to progress to the second year of the programme, see <u>General Academic</u> <u>Regulations – Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree</u> <u>Programme Level</u>.
- 8. In order to progress to the third year of the programme, see <u>General Academic</u> <u>Regulations – Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree</u> <u>Programme Level</u>.
- 9. In order to progress to the fourth year of the programme, see <u>General Academic</u> <u>Regulations – Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree</u> <u>Programme Level</u>.

### **Final Assessment and Honours Classification**

- 10. On successful completion of the fourth year, a candidate will be awarded the Level 4 credits corresponding to the modules taken.
- 11. The Final Honours Classification will normally be based on the first assessed attempt at compulsory and approved optional modules that are taken in the second, third and fourth years.

### Award

- 12. **BEng with Honours:** In order to qualify for the award of the degree of BEng with Honours in Structural and Architectural, see <u>General Academic Regulations –</u> <u>Undergraduate, Integrated Master and Professional Graduate Degree Programme</u> <u>Level;</u> and must include CL434 Individual Project.
- 13. **BEng:** In order to qualify for the award of the degree of BEng in Structural and Architectural Engineering, see <u>General Academic Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u>.
- 14. **Diploma of Higher Education:** In order to qualify for the award of a Diploma of Higher Education in Structural and Architectural Engineering, see <u>General Academic</u>

<u>Regulations – Undergraduate, Integrated Master and Professional Graduate Degree</u> <u>Programme Level.</u>

15. **Certificate of Higher Education:** In order to qualify for the award of a Certificate of Higher Education in Structural and Architectural Engineering, see <u>General Academic</u> <u>Regulations – Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree</u> <u>Programme Level</u>.

### Transfer

16. A candidate who fails to satisfy the progress or award requirements for the BEng in Structural and Architectural Engineering may be transferred to the degree of BEng in Engineering Studies.