FACULTY OF ENGINEERING

DEPARTMENT OF ELECTRONIC AND ELECTRICAL ENGINEERING

ELECTRONIC AND ELECTRICAL ENGINEERING – Bahrain

Bachelor of Engineering with Honours in Electronic and Electrical Engineering – Bahrain Bachelor of Engineering in Electronic and Electrical Engineering – Bahrain Diploma of Higher Education in Electronic and Electrical Engineering – Bahrain Certificate of Higher Education in Applied Sciences – Bahrain

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

Duration of study

1. The <u>General Academic Regulations – Undergraduate, Integrated Master and Professional</u> Graduate Degree Programme Level shall apply.

Mode of study

2. The programme is available by full-time study only.

Place of study

3. Students will study at the University of Strathclyde, Bahrain.

Curriculum

4. **First Year –** All students shall undertake modules amounting to 120 credits delivered by Study Group Ltd. as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
HF103	Academic English Skills	1	30
XXXXX	Electronics	1	10
MM157	Maths	1	20
MM155	Computational Maths	1	20
PH189	Physics 1	1	20
PH190	Physics 2	1	20

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

Compulsory Modules

Module Code	Module Title	Level	Credits
D1213	Engineering Design and Manufacture	2	10
XXXXX	Physical Electronics	2	10

E1207	Electromagnetism	2	10
E1269	Electronic and Electrical Principles 2	2	20
E1270	Digital Electronic Systems	2	20
E1271	Electronic and Electrical Techniques and Design 2	2	10
E1273	Engineering Design for Software Development 2	2	20
XXXXX	Engineering Mathematics 3E	2	20

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

Compulsory Modules

Module Code	Module Title	Level	Credits
E1320	Signals and Communication Systems	3	20
E1311	Electronic and Electrical Principles 3	3	20
E1312	Instrumentation and Microcontrollers	3	20
E1313	Engineering Analysis	3	20
E1324	Engineering Innovation and Management	3	10
E1318	Engineering Project	3	10
	Elective Modules	3	20

7. Fourth Year – All students shall undertake modules amounting to 120 credits as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
E1496	Project	4	40

<u>Optional modules</u> Students must choose 80 credits from the list below:

Module Code	Module Title	Level	Credits
E1315	Analogue and Digital System Design	3	20
E1466	Power, Electronics, Machines and Applications	4	20
E1467	Power System Design, Operation and Protection	4	20
E1468	Analogue Systems	4	20

E1469	Digital Signal Processing Principles	4	20
E1470	Information Transmission and Security	4	20
E1471	Communication Networks	4	20
E1472	Control Principles	4	20
E1473	Photonic Systems	4	20
E1474	Robotic Systems	4	20

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

Not all optional modules on this list will be available in each academic year.

Progress

- 8. In order to progress to second year, the <u>General Academic Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u> shall apply. In addition, students must have passed HF103 Academic English Skills with a mark of 60 or above by the second attempt, and to have passed the remaining 90 credits of the first year of the programme curriculum with a credit weighted average of 60 or above across those credits by the second attempt.
- 9. In order to progress to third year, the <u>General Academic Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u> shall apply.
- 10. In order to progress to fourth year, the <u>General Academic Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level shall apply</u>.

Final Assessment and Honours Classification

11. The final classification will normally be based on the first assessed attempt at modules taken in the third and fourth years.

Award: Subject to the completion of additional national requirements.

- 12. **BEng with Honours:** In order to qualify for the award of the degree of BEng with Honours in Electronic and Electrical Engineering Bahrain, see <u>General Academic Regulations Undergraduate</u>, Integrated Master and Professional Graduate Degree Programme Level.
- 13. **BEng:** In order to qualify for the award of the degree of BEng in Electronic and Electrical Engineering Bahrain, see <u>General Academic Regulations Undergraduate, 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 Electronic and Electrical Engineering Bahrain, see <u>General Academic Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u>.
- 15. **Certificate of Higher Education:** In order to qualify for the award of a Certificate of Higher Education in Applied Sciences Bahrain, see <u>General Academic Regulations –</u>
 Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.