# FACULTY OF ENGINEERING

## DEPARTMENT OF CHEMICAL AND PROCESS ENGINEERING

## **CHEMICAL ENGINEERING**

Bachelor of Engineering with Honours in Chemical Engineering - Degree Apprenticeship Bachelor of Engineering in Chemical Engineering - Degree Apprenticeship Diploma of Higher Education in Chemical Engineering – Degree Apprenticeship Certificate of Higher Education in Chemical Engineering – Degree Apprenticeship

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

#### Admission

 Typical entry requirements for the Degree Apprenticeship in chemical engineering (SIPPE) are 3 A-levels (ABB-BBB) including Maths, and Chemistry or Physics. Suitably qualified applicants may be admitted through a combination of industry experience and higher national qualifications. All applications will be treated on a case by case basis and only applicants employed in a suitable role and meeting the funding requirements of the Degree Apprenticeship will be considered.

### Mode of Study

2. This programme is available by distance learning only.

## **Duration of Study**

3. The normal duration of study is 5 years. The maximum duration of study is 6 years.

#### Curriculum

- 4. All students shall undertake modules amounting to 480 credits as below.
- 5. Year 1 All students shall undertake modules amounting to 120 credits as follows\*:

#### **Compulsory Modules**

Module Code	Module Title	Level	Credits
CP107	Chemistry for Chemical Engineering	1	10
CP108	Mathematics for Chemical Engineering	1	30
CP109	Basic Principles of Chemical Engineering	1	20
CP105	Process Engineering Knowledge, Skills and Behaviours 1	1	60

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

6. Year 2 - All students shall undertake modules amounting to 100 credits as follows\*:

## **Compulsory Modules**

Module Code	Module Title	Level	Credits
CP216	Process Engineering Knowledge, Skills and Behaviours 2	2	40
CP318	Professional Engineering and Project Management	3	10
CP209	Process Analysis and Statistics	2	20
CP211	Chemical Principles and Thermodynamics	2	20
CP319	Chemical Engineering Safety	3	10

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

7. Year 3 - All students shall undertake modules amounting to 90 credits as follows\*:

## Compulsory Modules

Module Code	Module Title	Level	Credits
CP208	Fluid Flow and Heat Transfer	2	20
CP324	Process Engineering Knowledge, Skills and Behaviours 3	3	30
CP320	Biochemical Engineering	3	10
CP321	Reactors	3	10
CP314	Mass Transfer and Separation Processes	3	20

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

8. Year 4 - All students shall undertake modules amounting to 90 credits as follows\*:

## **Compulsory Modules**

Module Code	Module Title	Level	Credits
CP310	Process Design and Simulation	3	20
CP411	Process Control and Environmental Technology	4	20
CP426	Process Engineering Knowledge, Skills and Behaviours 4	4	30
CP429	Numerical Methods and Programming	4	20

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

9. Year 5 - All students shall undertake modules amounting to 80 credits as follows\*:

## **Compulsory Modules**

Module Code	Module Title	Level	Credits
CP412	Advanced Separations and Problem Solving	4	20
CP428	Chemical Engineering Design	4	40
CP430	End Point Assessment and Project Planning	4	20

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

## Progress

- 10. In order to progress to the second year of the programme, students must normally have accumulated no fewer than 100 credits, including a pass in CP105 Process Engineering Knowledge, Skills and Behaviours 1.
- 11. In order to progress to the third year of the programme, students must normally have accumulated no fewer than 200 credits from the programme curriculum, including CP216 Process Engineering Knowledge, Skills and Behaviours 2.
- 12. In order to progress to the fourth year of the programme, students must normally have accumulated no fewer than 290 credits from the programme curriculum. including CP324 Process Engineering Knowledge, Skills and Behaviours 3.
- 13. In order to progress to the fifth year of the programme, students must normally have accumulated no fewer than 400 credits from the programme curriculum including CP426 Process Engineering Knowledge, Skills and Behaviours 4.

#### **Final Honours Classification**

14. The final Honours classification will normally be based on the first assessed attempt at compulsory modules at levels 3 and 4.

#### Award

- 15. **BEng with Honours:** In order to qualify for the award of the degree of BEng with Honours in Chemical Engineering, see <u>General Academic Regulations –</u> <u>Undergraduate</u>, Integrated Master and Professional Graduate Degree Programme <u>Level</u>.
- 16. **BEng:** In order to qualify for the award of the degree of BEng in Chemical Engineering, see <u>General Academic Regulations Undergraduate</u>, <u>Integrated Master and</u> <u>Professional Graduate Degree Programme Level.</u>
- 17. **Diploma of Higher Education:** In order to qualify for the award of Diploma in Higher Education in Chemical Engineering, students must have accumulated no fewer than 240 credits from the taught curriculum.

18. **Certificate of Higher Education:** In order to qualify for the award of Certificate in Higher Education in Chemical Engineering, students must have accumulated no fewer than 120 credits from the taught curriculum.