FACULTY OF ENGINEERING

DEPARTMENT OF DESIGN, MANUFACTURING AND ENGINEERING MANAGEMENT

MANUFACTURING ENGINEERING AND MANAGEMENT

Master of Engineering in Manufacturing Engineering and Management Bachelor of Engineering with Honours in Manufacturing Engineering and Management Bachelor of Engineering in Manufacturing Engineering and Management Diploma of Higher Education in Manufacturing Engineering and Management Certificate of Higher Education in Manufacturing Engineering and Management

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.

Mode of Study

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

Curriculum

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

Module Code	Module Title	Level	Credits
DM100	Design 1	1	20
DM101	Integrating Studies 1	1	20
DM102	Introduction to Production Engineering and Management	1	20
MM115	Mathematics 1D	1	20
16132	Engineering Mechanics 1	1	20
EE108	Electrical and Electronic Engineering	1	10
ME101	Heat and Flow 1	1	10

Compulsory Modules

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

Compulsory Modules

Module Code	Module Title	Level	Credits
ME217	Engineering Materials for Design	2	10
19222	Electrical Machines and Control	2	10

MS210	Analysing and Improving Operations	2	20
DM202	Design and Manufacturing Management	2	20
DM204	Integrating Studies 2	2	20
DM205	Production Techniques 1	2	20
	Elective Module(s)	1	20

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

Compulsory Modules

Module Code	Module Title	Level	Credits
DM305	Innovation Management	3	20
DM307	Production and Operations Management	3	20
DM308	Production Techniques 2	3	20
DM312	Mechatronic Design and Applications	3	10
DM313	Multidisciplinary Integrating Project	3	10
DM314	Individual Integrating Project	3	10
DM315	Mechatronics: Product Programming	3	10

Optional Modules

20 credits at Level 3 or 4 chosen from the list of options as approved by the Programme Leader.

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

Compulsory Modules

Module Code	Module Title	Level	Credits
DM401	Advanced Product Design and Manufacture	4	20
DM402	Individual Project 1	4	40
DM403	Industrial Group Project 1	4	20
DM404	Quality Management	4	20

Optional Modules

20 credits at Level 3, 4 or 5 chosen from the list of optional modules as approved by the Programme Leader.

6. **Fifth Year** - All students shall undertake modules amounting to no fewer than 120 credits as follows:

Compulsory Modules

Module Code	Module Title	Level	Credits
DM511	Individual Project 2	5	60
DM501	Industrial Group Project 2	5	20
DM502	Research Studies	5	20

Optional Modules

No fewer than 20 credits at Level 4 or 5 (which must bring the total at Level 5 to no fewer than 120 credits) chosen from the list of optional modules 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>.
- 10. In order to progress to the fifth year of the programme, see <u>General Academic</u> <u>Regulations – Undergraduate, Integrated Master and Professional Graduate Degree</u> <u>Programme Level.</u>

Final Classification

11. The final classification for the chosen degree in Manufacturing Engineering and Management will normally be based on the first assessed attempt at all modules taken in the third, fourth and fifth years.

Award

- 12. **MEng:** In order to qualify for the award of the degree of MEng in Manufacturing Engineering and Management, the <u>General Academic Regulations – Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u> shall apply, and must include DM402 Individual Project 1 and DM511 Individual Project 2.
- 13. **BEng with Honours:** In order to qualify for the award of the degree of BEng with Honours in Manufacturing Engineering and Management, the <u>General Academic</u>

<u>Regulations – Undergraduate, Integrated Master and Professional Graduate Degree</u> <u>Programme Level</u> shall apply, and must include DM402 Individual Project 1.

- 14. **BEng:** In order to qualify for the award of the degree of BEng in Manufacturing Engineering and Management, see <u>General Academic Regulations – Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree Programme Level</u>.
- 15. **Diploma of Higher Education:** In order to qualify for the award of a Diploma of Higher Education in Manufacturing Engineering and Management, see <u>General Academic</u> <u>Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree</u> <u>Programme Level</u>.
- 16. **Certificate of Higher Education:** In order to qualify for the award of a Certificate of Higher Education in Production Engineering and Management, see <u>General Academic</u> <u>Regulations Undergraduate</u>, <u>Integrated Master and Professional Graduate Degree</u> <u>Programme Level</u>.