FACULTY OF ENGINEERING

DEPARTMENT OF DESIGN, MANUFACTURING AND ENGINEERING MANAGEMENT

PRODUCT DESIGN AND INNOVATION

Master of Science in Product Design and Innovation
Bachelor of Science with Honours in Product Design and Innovation
Bachelor of Science in Product Design and Innovation
Diploma of Higher Education in Product Design and Innovation
Certificate of Higher Education in Product Design and Innovation

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

Status of the Programmes

1. All students are normally admitted in the first instance as potential Honours students.

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:

Compulsory Modules

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
DM103	Technology Concepts	1	20
Z1212	Introduction to Business Start-Up	1	20
	Elective Module(s)		20

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

Compulsory Modules

Module Code	Module Title	Level	Credits
DM200	Design 2	2	20
DM202	Design and Manufacturing Management	2	20

DM203	Design Prototyping	2	20
DM204	Integrating Studies 2	2	20
DM205	Production Techniques 1	2	20
Z1218	New Venture Planning	2	20

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

Compulsory Modules

Module Code	Module Title	Level	Credits
DM300	Design Emotion and Experience	3	20
DM305	Innovation Management	3	20
DM306	Product Development	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

6. **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 & Manufacture	4	20
DM402	Individual Project 1	4	40
DM403	Industrial Group Project 1	4	20
DM411	Design Interaction	4	20

Optional Modules

20 credits chosen from the list below, or such other modules as approved by the Year Adviser.

Module Code	Module Title	Level	Credits
DM307	Production and Operations Management	3	20

DM404	Quality Management	4	20
DM406	Industrial Placement 1	4	20
Various	Vertically Integrated Project	4	10
DM506	Industrial Placement 4	5	20
DM918	People, Organisation and Technology	5	10
DMXXX	Management of Technology and Innovation	5	10
DM923	Product Modelling and Visualisation	5	10
DM926	Supply Chain Operations	5	10
DMXXX	Digital Manufacturing and Smart Products	5	10
DM985	Remanufacturing	5	10
DM993	Systems Architectures and Design	5	10
DM994	Systems Engineering Concepts	5	10
EFXXX	Design Methods and Management	5	10

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

7. **Fifth Year** - All students shall undertake modules amounting to 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 below, or such other modules as approved by the Year Adviser.

Module Code	Module Title	Level	Credits
DM404	Quality Management	4	20
DM406	Industrial Placement 1	4	20
Various	Vertically Integrated Project	4	10
DM503	Global Design	5	10

DM506	Industrial Placement 4	5	20
DM918	People, Organisation and Technology	5	10
DMXXX	Management of Technology and Innovation	5	10
DM923	Product Modelling and Visualisation	5	10
DM926	Supply Chain Operations	5	10
DM933	Engineering Risk Management	5	10
DM955	Total Quality Management	5	10
DM939	Digital Manufacturing Concepts	5	10
DM941	Fundamentals of Lean Six Sigma	5	10
DM943	Sustainable Product Design and Manufacturing	5	10
DM951	Design for Industry 4 and Smart Products	5	10
DM983	Design Form and Aesthetics	5	10
DM984	Human Centred Design	5	10
DM985	Remanufacturing	5	10
DM993	Systems Architectures and Design	5	10
DM994	Systems Engineering Concepts	5	10
EFXXX	Design Methods and Management	5	10

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

Progress

8. In order to progress to the second year of the programme, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

9. In order to progress to the third year of the programme, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

10. In order to progress to the fourth year of the programme, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

11. In order to progress to the fifth year of the programme, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

Final Honours Classification

12. The final Honours classification will normally be based on the first assessed attempt at compulsory and specified optional modules which are taken in the second, third and fourth year of the programme.

Award

13. **MSci:** In order to qualify for the award of the degree of MSci in Product Design and Innovation, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level; and must include module DM402 Individual Project 1 and DM511 Individual Project 2.

14. **BSc with Honours:** In order to qualify for the award of the degree of BSc with Honours in Product Design and Innovation, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level; and must include module DM402 Individual Project 1.

15. **BSc:** In order to qualify for the award of the degree of BSc in Product Design and Innovation, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

16. **Diploma of Higher Education:** In order to qualify for the award of a Diploma of Higher Education in Product Design and Innovation, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.

17. **Certificate of Higher Education:** In order to qualify for the award of a Certificate of Higher Education in Product Design and Innovation, see General Academic Regulations – Undergraduate, Integrated Master and Professional Graduate Degree Programme Level.