# FACULTY OF ENGINEERING

# DEPARTMENT OF DESIGN, MANUFACTURING AND ENGINEERING MANAGEMENT

# **SPORTS ENGINEERING**

Master of Engineering in Sports Engineering Bachelor of Engineering with Honours in Sports Engineering Bachelor of Engineering in Sports Engineering Diploma of Higher Education in Sports Engineering Certificate of Higher Education in Sports 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>.

#### 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:

Com	pulsorv	/ 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
BE100	Anatomy and Physiology for Biomedical Engineers	1	20
	Elective Module(s)		20

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

## **Compulsory Modules**

Module Code	Module Title	Level	Credits
BE201	Biomechanics of Human Movement – Theory	2	20
BE202	Biomechanics of Human Movement - Measurement	2	20

DM200	Design 2	2	20
DM204	Integrating Studies 2	2	20
DM205	Production Techniques 1	2	20
DM206	Sports Engineering	2	20

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

# **Compulsory Modules**

Module Code	Module Title	Level	Credits
B1225	Physiology of Aerobic Exercise	2	20
DM303	Engineering Design	3	20
DM306	Product Development	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 Levels 3 or 4 chosen from the list of optional modules 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
DM402	Individual Project 1	4	40
DM403	Industrial Group Project 1	4	20
BE405	Sports Injury and Rehabilitation	4	20
BE400	Advanced Topics in Human Movement	4	20

# **Optional Modules**

20 credits at Levels 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 studied 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, 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, 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, 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 award for the chosen degree in Sports Engineering will normally be based on the first assessed attempt at all modules taken in the second, third, fourth and fifth years.

#### Award

- 12. **MEng:** In order to qualify for the award of the degree of MEng in Sports Engineering, see <u>General Academic Regulations Undergraduate, Integrated Master and Professional</u> <u>Graduate Degree Programme Level</u>; 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 Sports Engineering, see <u>General Academic Regulations Undergraduate</u>,

Integrated Master and Professional Graduate Degree Programme Level; and must include DM402 Individual Project 1.

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