FACULTY OF ENGINEERING

DEPARTMENT OF DESIGN, MANUFACTURING AND ENGINEERING MANAGEMENT

MECHATRONICS AND AUTOMATION

Master of Science in Mechatronics and Automation
Postgraduate Diploma in Mechatronics and Automation
Postgraduate Certificate in Mechatronics and Automation

These regulations are to be read in conjunction with General Academic Regulations - Postgraduate Taught Degree Programme Level.

Admission
1. See General Academic Regulations - Postgraduate Taught Degree Programme Level.

Duration of Study
2. See General Academic Regulations - Postgraduate Taught Degree Programme Level.

Mode of Study
3. The programmes may be available by full-time or part-time study.

Curriculum
4. All students shall undertake an approved curriculum as follows:

   i. for the Postgraduate Certificate no fewer than 60 credits from the lists of taught modules
   ii. for the Postgraduate Diploma no fewer than 120 credits from the lists of taught modules
   iii. for the degree of MSc no fewer than 180 credits including DM932 Postgraduate Individual Project

Compulsory Modules (Full-time Students)

Module Code	Module Title	Level	Credits
DM923	Product Modelling and Visualisation	5	10
DM931	Postgraduate Group Project	5	40
DM933	Engineering Risk Management	5	10
DM939	Digital Manufacturing	5	10
DM942	Manufacturing Automation	5	10
DM986	Mechatronic Systems Design Techniques	5	10
Students for the degree of MSc only:			

DM932	Postgraduate Individual Project	5	60

Compulsory Modules (Part-time Students)

Module Code	Module Title	Level	Credits
DM923	Product Modelling and Visualisation	5	10
DM931	Postgraduate Group Project	5	40
DM933	Engineering Risk Management	5	10
OR			
DM805	Engineering Risk Management (online)	5	10
DM939	Digital Manufacturing	5	10
DM942	Manufacturing Automation	5	10
DM986	Mechatronic Systems Design Techniques	5	10
Students for the degree of MSc only:			
DM932	Postgraduate Individual Project	5	60

Optional Modules

No fewer than 30 credits chosen from:

Module Code	Module Title	Level	Credits
DM934	Design Methods	5	10
DM945	Systems Thinking and Modelling	5	10
OR			
DM808	Introduction to Systems Thinking, Modelling and Optimisation (online)	5	10
DM954	Intelligent Sensing and Reasoning through Machine Learning	5	10
EE474	Robotics: Systems and Control	5	10
EE872	Control Principles 1	5	10
EE885	Software Design & Programming for Engineering	5	10

EE972	Control Principles	5	20
EE992	Neural Networks and Deep Learning	5	10
EF931	Project Management	5	10
OR			
DM811	Project Management (online)	5	10
September-intake students only:			
VP513	VIP for Sustainable Development 5	5	20

Students for the Postgraduate Diploma only, will have the additional optional module:

Module Code	Module Title	Level	Credits
DM815	PGDip Individual Project	5	20

Exceptionally, such other modules totalling no more than 20 credits, as approved by the Programme Leader.
Not all optional modules on this list will be available in each academic year. Please check your programme handbook for confirmation of which optional modules will run.

Examination, Progress and Final Assessment

5. See General Academic Regulations - Postgraduate Taught Degree Programme Level.

6. The final award will be based on performance in the examinations, coursework and the Postgraduate Individual Project where undertaken.

Award

7. **Degree of MSc:** In order to qualify for the award of the degree of MSc in Mechatronics and Automation, a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits, of which 60 must have been awarded in respect of the Postgraduate Individual Project DM932.

8. **Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma in Mechatronics and Automation, a candidate must have accumulated no fewer than 120 credits from the programme curriculum.

9. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Mechatronics and Automation, a candidate must have accumulated no fewer than 60 credits from the taught modules of the programme.