FACULTY OF ENGINEERING

DEPARTMENT OF DESIGN, MANUFACTURING AND ENGINEERING MANAGEMENT

ADVANCED MANUFACTURING: TECHNOLOGY AND SYSTEMS

ADVANCED MANUFACTURING: FORGING AND FORMING

Master of Science in Advanced Manufacturing: Technology and Systems Master of Science in Advanced Manufacturing: Forging and Forming Postgraduate Diploma in Advanced Manufacturing Postgraduate Certificate in Advanced Manufacturing

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

Admission

- 1. See <u>General Academic Regulations Postgraduate Taught Degree Programme Level.</u>
- 2. Students for the MSc in Advanced Manufacturing: Forging and Forming will normally be admitted in the first instance to the EngD in Advanced Manufacturing: Forging and Forming

Duration of Study

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

Mode of Study

4. The programmes are available by full-time and part-time study.

Curriculum

- 5. All students shall undertake an approved curriculum as follows:
 - i. for the Postgraduate Certificate no fewer than 60 credits chosen from List A,
 - ii. for the Postgraduate Diploma no fewer than 120 credits including all the Compulsory Modules, and
 - iii. for the degree of MSc no fewer than 180 credits including the Postgraduate Individual Project.
- 6. Students without appropriate background knowledge may be required, additionally, to undertake selected foundation modules.

Compulsory Modules

Module Code	Module Title	Level	Credits
DM920	Strategic Technology Management	5	10
DM942	Manufacturing Automation	5	10
DM946	Micro- and Nano-Manufacturing	5	10

DM947	Advanced Forming and Technology Systems	5	10
DM948	Advanced Materials and Production Technology	5	10
Students for the degree of MSc:			
DM932	Postgraduate Individual Project	5	60

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

Together with modules appropriate to the chosen programme.

Advanced Manufacturing: Technology and Systems

Module Code	Module Title	Level	Credits
DM931	Postgraduate Group Project	5	40

And 30 credits from the list of optional modules below.

Advanced Manufacturing: Forging and Forming

Module Code	Module Title	Level	Credits
BE919	Research Methodology	5	10

And 60 credits from the list of optional modules below.

Optional Modules

Module Code	Module Title	Level	Credits
DM986	Mechatronic Systems Design Techniques	5	10
DM927	Strategic Supply Chain Management	5	10
DM941	Fundamentals of Lean Six Sigma	5	10
DM943	Sustainable Product Design and Manufacturing	5	10
DM945	Systems Thinking and Modelling	5	10
EF931	Project Management	5	10
DM923	Product Modelling and Visualisation	5	10
DM933	Engineering Risk Management	5	10

DM935	Management of Total Quality and Continuous Improvement	5	10
EF945	Knowledge and Information Management	5	10

Examination, Progress and Final Assessment

- 7. See <u>General Academic Regulations Postgraduate Taught Degree Programme Level.</u>
- 8. The final award will be based on performance in the examinations, coursework and the Postgraduate Individual Project where undertaken and, if required.

Award

- 9. **Degree of MSc:** In order to qualify for the award of the degree of MSc in Advanced Manufacturing: Technology and Systems or in Advanced Manufacturing: Forging and Forming, a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits from the appropriate programme curriculum, of which 60 must have been awarded in respect of the Individual Project DM932.
- 10. **Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma in Advanced Manufacturing, a candidate must have accumulated no fewer than 120 credits from the programme curriculum.
- 11. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Advanced Manufacturing, a candidate must have accumulated no fewer than 60 credits from the programme curriculum.