FACULTY OF ENGINEERING

DEPARTMENT OF DESIGN, MANUFACTURING AND ENGINEERING MANAGEMENT

TECHNOLOGY VENTURES WITH DESIGN ENGINEERING

Master of Science in Technology Ventures with Design Engineering Postgraduate Diploma in Technology Ventures with Design Engineering Postgraduate Certificate in Design Engineering

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

Admission

- 1. Notwithstanding the <u>General Academic Regulations Postgraduate Taught Degree Programme Level</u>, successful applicants shall possess:
 - i. a first or second class Honours degree in an Engineering, Design, Product Development, Science or Technology subject; or
 - ii. a qualification deemed by the Programme Director acting on behalf of the Senate to be equivalent to (i) above; or
 - iii. have satisfactorily obtained 99 CMU units of study (150 credits) from the MS in Technology Ventures at Carnegie Mellon University, including the Master of Science Technology Ventures Internship.
- 2. In all cases, applicants whose first language is not English, shall be required to demonstrate an appropriate level of English.

Duration of Study

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

Mode of Study

4. The programme is available by full-time study only.

Curriculum

- 5. All students shall undertake an approved curriculum as follows:
 - i. for the Postgraduate Certificate no fewer than 60 credits
 - ii. for the Postgraduate Diploma no fewer than 120 credits
 - iii. for the degree of MSc no fewer than 180 credits including a project.

Compulsory Modules

Module Code	Module Title	Level	Credits
DM503	Global Design	5	10
DM923	Product Modelling & Visualisation	5	10
DM931	Industry Group Project	5	40
DM934	Design Methods	5	10
EF927	Design Management	5	10

Students choose 40 credits from:

Module Code	Module Title	Level	Credits
AB975	Sustainability	5	10
DM933	Engineering Risk Management	5	10
DM943	Sustainable Product Design and Manufacturing	5	10
DM948	Advanced Materials & Production Technology	5	10
DM985	Remanufacturing	5	10
DM986	Mechatronic Systems Design Techniques	5	10
DM920	Strategic Technology Management	5	10
DM926	Supply Chain Operations	5	10
DM928	Enterprise Resource Planning	5	10
DM935	Management of Total Quality and Continuous Improvement	5	10
DM941	Fundamentals of Lean Six Sigma	5	10
DM944	Product Costing and Financial Management	5	10
DM945	System Thinking and Modelling	5	10
DM948	Advanced Materials & Production Technology	5	10
DM981	Management of Innovation	5	10
DM983	Design Form and Aesthetics	5	10
DM984	Human Centred Design	5	10

Exceptionally, such other modules totalling no more than 40 credits as approved by the Programme Director.

Students for the degree of MSc only

Module Code	Module Title	Level	Credits
DM932	Postgraduate Individual Project	5	60

Examination, Progress and Final Assessment

- 6. See General Academic Regulations Postgraduate Taught Degree Programme Level.
- 7. The final award will be based on performance in the examinations, coursework, and the Postgraduate Individual Project where undertaken.

Award

- 8. **Degree of MSc**: In order to qualify for the award of the degree of MSc in Technology Ventures with Design Engineering a candidate must have performed to the satisfaction of the Board of Examiners and must have accumulated no fewer than 180 credits including all the compulsory and optional modules plus the Postgraduate Individual Project DM932.
- 9. **Postgraduate Diploma**: In order to qualify for the award of the Postgraduate Diploma in Technology Ventures with Design Engineering a candidate must have accumulated no fewer than 120 credits including all the compulsory modules and optional modules.
- 10. Postgraduate Certificate: In order to qualify for the award of the Postgraduate Certificate in Design Engineering a candidate must have accumulated no fewer than 60 credits must be completed.