FACULTY OF ENGINEERING

DEPARTMENT OF ELECTRONIC AND ELECTRICAL ENGINEERING

MACHINE LEARNING AND DEEP LEARNING

Master of Science in Machine Learning and Deep Learning Postgraduate Diploma in Machine Learning and Deep Learning Postgraduate Certificate in Machine Learning and Deep Learning

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

Admission

- 1. Notwithstanding the <u>General Academic Regulations Postgraduate Taught Degree Programme Level</u>, applicants shall possess:
 - i. a first or good second class Honours degree (in electronic, electrical, computer science or other science-related subject) from a United Kingdom university; or
 - ii. a qualification deemed by the Programme Leader acting on behalf of Senate to be equivalent; or
 - iii. have appropriate professional experience.
- 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 programmes are available by full-time study only.

Curriculum

- 5. All students shall undertake an approved curriculum as follows:
 - i. Postgraduate Certificate no fewer than 60 credits
 - ii. Postgraduate Diploma no fewer than 120
 - iii. degree of MSc no fewer than 180 credits including the EE997 project.

Compulsory Modules

| Module Code | Module Title | Level | Credits |
|-------------|--|-------|---------|
| DM954 | Intelligent Sensing and Reasoning through Machine Learning | 5 | 10 |
| EE992 | Neural Networks and Deep Learning | 5 | 10 |
| EE969 | Digital Signal Processing Principles | 5 | 20 |
| EE986 | Assignment and Professional Studies | 5 | 20 |

| CS982 | Big Data Technologies | 5 | 20 | | |
|--------------------------------------|-------------------------------------|---|----|--|--|
| CS985 | Machine Learning for Data Analytics | 5 | 20 | | |
| Students for the degree of MSc only: | | | | | |
| EE997 | MSc Project | 5 | 60 | | |

Students who have previously completed any module from the list of compulsory modules will be required to undertake an appropriate alternative as approved by the Programme Leader.

Optional Modules

No fewer than 20 credits chosen from:

| Module Code | Module Title | Level | Credits |
|-------------|-----------------------------|-------|---------|
| EE981 | Image and Video Processing | 5 | 20 |
| CS412 | Information Access & Mining | 5 | 20 |

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

Students may not select any module from the list of optional modules which they have previously successfully completed.

Students without appropriate background knowledge may be additionally required to undertake selected foundation modules.

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 EE997 Project where undertaken.

Award

- 8. **Degree of MSc:** In order to qualify for the award of the degree of MSc in Machine Learning and Deep Learning, 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 EE997 Project.
- 9. **Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma in Machine Learning and Deep Learning, a candidate must have accumulated no fewer than 120 credits from the programme curriculum.
- 10. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Machine Learning and Deep Learning, a candidate must have accumulated no fewer than 60 credits from the programme curriculum.