

# 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 programme regulations are for the **January intake only** and should be read in conjunction with [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).*

#### Admission

1. Notwithstanding the [General Academic Regulations - Postgraduate Taught Degree Programme Level](#), 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 who begin their studies in January 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
  - iii. for the 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

EE669	Digital Signal Processing Principles	5	10
EE886	Assignment and Professional Studies	5	20
CS985	Machine Learning for Data Analytics	5	20
CS823	Reasoning for Intelligent Agents	5	20
CS826	Deep Learning Theory and Practice	5	20
<b>Students for the degree of MSc only:</b>			
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 10 credits chosen from:

<b>Module Code</b>	<b>Module Title</b>	<b>Level</b>	<b>Credits</b>
EE681	Image Processing	5	10
EE885	Software Design & Programming For Engineering	5	10

Exceptionally, such other level 5 modules totalling no more than 10 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**

- See [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).
- The final award will be based on performance in the examinations, coursework and the EE997 Project where undertaken.

### **Award**

- 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.
- 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.