# FACULTY OF ENGINEERING

## DEPARTMENT OF ELECTRONIC AND ELECTRICAL ENGINEERING

# WIND ENERGY SYSTEMS

### Master of Science in Wind Energy Systems Postgraduate Diploma in Wind Energy Systems Postgraduate Certificate in Wind Energy Systems

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

- 1. Notwithstanding the <u>General Academic Regulations Postgraduate Taught Degree</u> <u>Programme Level</u>, applicants shall possess:
  - i. a first or second class Honours degree (in Electrical or Electronic Engineering or a cognate 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 and part-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 the EE990 project.

#### Compulsory Modules

Module Code	Module Title	Level	Credits	
EE989	Wind Turbine Technology	5	20	
EE988	Power Systems and Wind Integration	5	20	
EE986	Assignment and Professional Studies	5	20	
Students for the degree of MSc only:				

EE990	MSc Project	5	60
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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**

All students shall undertake at least 40 credits from List A.

Module Code	Module Title	Level	Credits
EE873	Advanced Power and Energy Systems	5	20
EE966	Power Electronics, Machines and Applications	5	20
EE967	Power System Design, Operation and Protection	5	20
EE972	Control Principles	5	20
EE974	High Voltage Technology and Electromagnetic Compatibility	5	20
EE975	Power Electronics for Energy and Drive Control	5	20
EE976	Power System Economics, Markets and Asset Management	5	20
EE999	PGDip Electronic and Electrical Engineering Dissertation	5	20

#### List A

#### List B

Module Code	Module Title	Level	Credits
EC928	Energy Economics	5	10
NM946	Inspection and Survey	5	20
NM969	Renewable Marine Energy Systems	5	10
CL961	Geographical Information Systems	5	10
EV939	Environmental Impact Assessment	5	10

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 <u>General Academic Regulations Postgraduate Taught Degree Programme Level.</u>
- 7. The final award will be based on performance in the examinations, coursework and the EE990 Project where undertaken.

#### Award

- 8. **Degree of MSc:** In order to qualify for the award of the degree of MSc in Wind Energy Systems, 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 Project EE990.
- 9. **Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma in Wind Energy Systems, 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 Wind Energy Systems, a candidate must have accumulated no fewer than 60 credits from the programme curriculum.