

# FACULTY OF ENGINEERING

## DEPARTMENT OF ELECTRONIC AND ELECTRICAL ENGINEERING

### FUTURE POWER NETWORKS AND SMART GRIDS

#### Master of Research in Future Power Networks and Smart Grids Postgraduate Certificate in Future Power Networks and Smart Grids

*For regulations relating to admissions, duration of study, examinations, progress, final assessment, award and research elements of this degree, please refer to the [General Academic Regulations - Postgraduate Research Degree Regulations](#).*

*For regulations relating to taught (compulsory/optional) modules, please refer to the [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).*

#### **Admission**

1. Applicants shall possess:
  - i. a degree (or, in the case of direct entry to the degree of MRes, a first or second class Honours degree) from a United Kingdom University (in an appropriate discipline); or
  - ii. a qualification deemed by the Programme Director acting on behalf of Senate to be equivalent to (i) above.
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 Research Degree Regulations](#).

#### **Mode of Study**

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

#### **Curriculum**

5. All students shall undertake an approved curriculum as follows:

#### **Compulsory Modules**

Module Code	Module Title	Level	Credits
EE800	MRes Dissertation	5	100
EE815	Future Power Networks and the Smart Grid Paradigm	5	10
EE802	Control and Protection of Future Networks	5	10
EE803	Power Electronics for Transmission and Distribution Networks	5	10
EE805	Communications for Power Networks	5	10
EE962	Power Systems and Wind Integration 1	5	10

## **Optional Modules**

No fewer than 30 credits chosen from:

<b>Module Code</b>	<b>Module Title</b>	<b>Level</b>	<b>Credits</b>
EE804	Role of Demand and Customers in Smart Grid Operation	5	10
EE806	Offshore and Pan European Supergrids	5	10
EE807	Managing Risk and Uncertainty in Grid Operation	5	10
EE808	Asset Management and Condition Monitoring	5	10
EE812	Cyber Security and Data Privacy	5	10

Such other modules as may be approved by the Programme Leader.

### **Examination, Progress and Final Assessment**

6. See [General Academic Regulations - Postgraduate Research Degree Regulations](#).

### **Award**

7. **Degree of MRes:** In order to qualify for the award of the degree of MRes in Future Power Networks and Smart Grids, a candidate must have accumulated no fewer than 180 credits, of which 100 must have been awarded in respect of the Dissertation EE800.
8. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Future Power Networks and Smart Grids, a candidate must have accumulated no fewer than 60 credits from the taught modules of the programme curriculum.