# FACULTY OF ENGINEERING

## DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING

## SATELLITE DATA FOR SUSTAINABLE DEVELOPMENT

Master of Science in Satellite Data for Sustainable Development Postgraduate Diploma in Satellite Data for Sustainable Development Postgraduate Certificate in Satellite Data for Sustainable Development

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</u> <u>Programme Level</u>, applicants shall possess:
  - i. a degree (or in the case of direct entry to the degree of MSc, a first or second class Honours degree) from a United Kingdom university in a Business, Social Science, Science or Engineering field; or
  - ii. possess a qualification deemed by the Programme Leader 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 competence.

### Duration of Study

3. See <u>General Academic Regulations - Postgraduate Taught Degree Programme Level.</u>

#### Mode of Study

4. The programmes are available by full-time or part-time study.

#### Curriculum

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

#### **Compulsory Modules**

Module Code	Module Title	Level	Credits
CL961	Geographical Information Systems	5	10
ME975	Satellite Data Assimilation and Analysis	5	10
ME977	Machine Learning for Satellite Data	5	10
ME976	Satellite Applications for Sustainable Development Goals	5	20
Students for the degree of MSc only:			
EF900	Project	5	60

### **Optional Modules**

A minimum of 20 credits from the following:

Module Code	Module Title	Level	Credits
EF931	Project Management	5	10
AB975	Sustainability (Sem 1)	5	10
CL994	Circular Economy and Transformations Towards Sustainability	5	10
EF932	Risk Management	5	10
CS978	Legal, Ethical and Professional issues for the Information Society	5	10
EV939	Environmental Impact Assessment	5	10

Modules, bringing taught credit total to 120 credits, to be chosen from:

Module Code	Module Title	Level	Credits
AB931	Design Studio	5	10
AB935	Urban Landscape Design	5	10
CL971	Air pollution, Climate Change and Human Health	5	10
CS952	Database & Web Systems Development	5	20
CS985	Machine Learning for Data Analytics	5	20
CS988	Big Data Tools and Techniques	5	10
CS989	Big Data Fundamentals	5	10
CS990	Database Fundamentals	5	10
ME512	Spaceflight Mechanics	5	10
ME517	Spaceflight Systems	5	10
ME927	Energy Resources and Policy	5	10
ME928	Energy Systems and Analysis	5	10
ME930	Energy Modelling and Monitoring	5	10
NM833	Marine Renewable Energy Systems	5	10
Z1931	Entrepreneurship, Innovation and Commercialisation	5	10
Z1986	New Venture Planning	5	10

Exceptionally, such other Level 5 modules, totalling no more than 20 credits, as approved by the Programme Leader.

Postgraduate Diploma students only will be able to choose the following optional class:

Module Code	Module Title	Level	Credits
ME973	Mechanical and Aerospace Engineering PGDip Dissertation	5	20

#### **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 project where undertaken.

#### Award

- 8. **Degree of MSc:** In order to qualify for the award of the degree of MSc in Satellite Data for Sustainable Development, 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 EF900.
- 9. **Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma in Satellite Data for Sustainable Development, a candidate must have accumulated no fewer than 120 credits from the taught modules of the programme.
- 10. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Satellite Data for Sustainable Development, a candidate must have accumulated no fewer than 60 credits from the taught modules of the programme.