FACULTY OF ENGINEERING

DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING

ADVANCED MECHANICAL ENGINEERING (ONLINE LEARNING)

Master of Science in Advanced Mechanical Engineering (online learning) Postgraduate Diploma in Advanced Mechanical Engineering (online learning Postgraduate Certificate in Advanced Mechanical Engineering (online learning)

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 Science or Engineering; or
 - ii. a qualification deemed by the Course 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 competence.

Duration of Study

See General Academic Regulations - Postgraduate Taught Degree Programme Level.

Mode of Study

3. The programmes are available by part-time online-learning only.

Curriculum

- 4. 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 project

Compulsory Modules

Students for the degree of MSc only:

Module Code	Module Title	Level	Credits
ME900	Project	5	60

Optional Modules

Students shall undertake 120 credits from the list below:

Module Code	Module Title	Level	Credits
ME529	Aerodynamics in C	5	10

Electrical Power Systems	5	10
Gas and Steam Turbines	5	10
Nuclear Power Systems	5	10
Introduction to Open-Source CFD	5	10
Pressurised Systems	5	10
Hydraulics	5	10
Boiler Thermal Hydraulics	5	10
Applied Metallurgy	5	10
Degradation of Metals and Alloys	5	10
Structural Integrity	5	10
FEA in Mechanical Engineering Design	5	10
Fundamentals of Material Science	5	10
Fundamentals of Aeronautical Engineering	5	10
Financial Information	5	10
Introduction to Systems Thinking, Modelling and Optimisation	5	10
People, Organisation and Leadership	5	10
Project Management	5	10
Strategic Procurement Management	5	10
Technology and Innovation Management	5	10
	Gas and Steam TurbinesNuclear Power SystemsIntroduction to Open-Source CFDPressurised SystemsHydraulicsBoiler Thermal HydraulicsApplied MetallurgyDegradation of Metals and AlloysStructural IntegrityFEA in Mechanical Engineering DesignFundamentals of Material ScienceFundamentals of Aeronautical EngineeringFinancial InformationIntroduction to Systems Thinking, Modelling and OptimisationPeople, Organisation and LeadershipProject ManagementStrategic Procurement Management	Gas and Steam Turbines5Nuclear Power Systems5Introduction to Open-Source CFD5Pressurised Systems5Hydraulics5Boiler Thermal Hydraulics5Applied Metallurgy5Degradation of Metals and Alloys5Structural Integrity5FEA in Mechanical Engineering Design5Fundamentals of Material Science5Fundamentals of Aeronautical Engineering5Financial Information5Introduction to Systems Thinking, Modelling and Optimisation5Project Management5Strategic Procurement Management5

Students for the Postgraduate Diploma only, in addition will have the optional module:

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

Not all optional modules in these lists will be available in each academic year. Please check your programme handbook for confirmation of which optional modules will run.

Exceptionally, such other Level 5 modules as may be approved by the Programme Director.

Examination, Progress and Final Assessment

- 5. The <u>General Academic Regulations Postgraduate Taught Degree Programme Level</u>, shall apply.
- 6. The final award will be based on performance in the examinations, coursework and the project where undertaken.

Award

- 7. **Degree of MSc:** In order to qualify for the award of the degree of MSc Advanced Mechanical Engineering (online 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 project ME900.
- 8. **Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma in Advanced Mechanical Engineering (online learning), a candidate must have accumulated no fewer than 120 credits from the taught modules of the programme.
- 9. **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Advanced Mechanical Engineering (online learning), a candidate must have accumulated no fewer than 60 credits from the taught modules of the programme.