

Mechanical & Aerospace Engineering – Exchange Student Class Information

Class Syllabuses 2021/22

(R) = Registrar in charge of class.

Past exams papers (hard and electronic copies) can be found in the University Library.

Module Description Forms contain comprehensive up-to-date information on all classes including assessment procedures and can be found on the Departmental website at [Module Descriptors](#) under “Further Information”.

1st YEAR CLASSES

16110 Energy and the Environment – 5 ECTS

Semester 1: Dr William Dempster (R)

16130 Introduction to Engineering – 5 ECTS

Semester 2: Prof Donald Mackenzie (R)

2nd YEAR CLASSES

16231 (*ME207, ME213) Flight and Spaceflight – 5 ECTS

Semester 1 and 2: Dr Matthew Stickland (R)

*NB: Alternative codes for exchange students: ME207 Sem 1, ME213 Sem 2 (2.5 ECTS)

16232 Engineering Mechanics 2 - 10 ECTS

Semester 1 and 2: Dr Robert Hamilton (R)

16259 Aero-Design 1 - 5 ECTS

Semester 2: Dr Mohammed Afsar (R)

16263 (*ME215, ME216) Automotive Systems 1 – 5 ECTS

Semester 1 and 2: Mr Cameron Johnstone (R)

*NB: Alternative codes for exchange students: ME215 Sem 1, ME216 Sem 2 (2.5 ECTS)

16288 Professional Studies – 5 ECTS

Semester 2: Dr Barbara Keating (R)

16293 Environmental Engineering Science 1 – 5 ECTS

Semester 1: Dr Daniel Costola (R)

16294 Energy Systems 1 – 5 ECTS

Semester 1 and 2: Mr Cameron Johnstone (R)

ME203 (*ME204, ME205) Heat and Flow 2 - 10 ECTS

Semester 1 and 2: Dr Monica Oliveira (R)

*NB: Alternative codes for exchange students: ME204 Sem 2, ME205 Sem 1 (2.5 ECTS)

ME209 Mathematical Modelling and Analysis - 10 ECTS

Semester 1 and 2: Dr Haofeng Chen (R)

ME212 Materials Engineering and Design – 5 ECTS

Semester 1 and 2: Dr Andrew McLaren

3rd YEAR CLASSES

16327 Structural Mechanics – 5 ECTS

Semester 1: Dr Marcus Wheel (R)

16361 (*ME305, 16318) Dynamics & Control – 10 ECTS

Semester 1 and 2: Dr Christie Maddock (R)

*NB: Alternative codes for exchange students: ME305 Sem 1, 16318 Sem 2 (5 ECTS)

16363 (*16366, 16367) Engineering Analysis 3 - 10 ECTS

Semester 1 and 2: Dr Marco Fossati (R)

*NB: Alternative codes for exchange students: 16366 Sem 1, 16367 Sem 2 (5 ECTS)

ME301 (*ME302, ME303) Heat and Flow 3 - 10 ECTS

Semester 1 and 2: Dr Konstantinos Ritos (R)

*NB: Alternative codes for exchange students: ME302 Sem 2, ME303 Sem 1 (5 ECTS)

4th YEAR CLASSES

16402 (*16460, 16464) Case Studies in Engineering – 5 ECTS

Semester 1 and 2: Dr Olga Ganilova (R)

*NB: Alternative codes for exchange students: 16460 Sem 1, 16464 Sem 2 (2.5 ECTS)

16429 Computer Aided Engineering Design - 10 ECTS

Semester 1 and 2: Dr Haofeng Chen (R)

ME403 (*ME406, ME418) Engineering Materials Selection – 5 ECTS

Semester 1 and 2: Prof Bradley Wynne (R)

*NB: Alternative codes for exchange students: ME406 Sem 1, ME418 Sem 2 (2.5 ECTS)

ME404 Energy Systems Modelling – 5 ECTS

Semester 2: Dr Daniel Costola (R)

ME405 Heat and Flow 4 – 5 ECTS

Semester 1 and 2: Dr Mohammed Afsar (R)

ME414 (*16415) Advanced Mechanics & Dynamics - 10 ECTS

Semester 1 and 2: Dr Marcus Wheel (R)

*NB: Alternative code for exchange students: 16415 Sem 1 (5 ECTS)

ME415 Strategic Analysis of Engineering Business Case Studies – 5 ECTS

Semester 1: Dr Ioannis Kokkinakis (R)

ME416 Engineering Ethics – 5 ECTS

Semester 2: Prof Donald Mackenzie (R)

(This class must be started in Week 1 – there will be no opportunity to join the class after this)

5th YEAR CLASSES

16565 Engineering Composites – 5 ECTS

Semester 2: Dr Barbara Keating (R)

16587 Pressurised Systems – 5 ECTS

Semester 1: Prof David Nash (R)

ME512 Spaceflight Mechanics – 5 ECTS

Semester 1: Prof Massimiliano Vasile (R)

ME514 Advanced Topics in Fluid Systems Engineering – 5 ECTS

Semester 2: Dr Ioannis Kokkinakis (R)

ME517 Spaceflight Systems – 5 ECTS

Semester 2: Prof Massimiliano Vasile (R)

ME526 Engineering Plasticity – 5 ECTS

Semester 1: Prof Donald Mackenzie (R)

ME527 Introduction to Engineering Optimisation – 5 ECTS

Semester 2: Dr Edmondo Minisci (R)

ME528 Control Systems Design – 5 ECTS

Semester 1: Prof Matthew Cartmell (R)

POSTGRADUATE CLASSES

These can be taken by students who are in their 4th or 5th year of studies

ME926 Nuclear Power Systems – 5 ECTS

Semester 2: Dr Paul Tuohy (R)

ME927 Energy Resources and Policy – 5 ECTS

Semester 1: Dr Nicolas Kelly (R)

ME928 Energy Systems Analysis – 5 ECTS

Semester 1: Dr Paul Tuohy (R)

ME929 Electrical Power Systems – 5 ECTS

Semester 1: Dr Nicolas Kelly (R)

ME930 Energy Modelling and Monitoring – 5 ECTS

Semester 1: Dr Daniel Costola (R)

Module Descriptors for all of the above classes can be found at [Module Descriptors](#)
under "Further Information"