

**ADVANCED MECHANICAL ENGINEERING (ONLINE – JANUARY START - PART TIME)
(MSc/PgDip/PgCert)**

63UH30B1/63UH30VX63UH30VZ

Duration: MSc 27 months part-time; PgDip 24 months part-time; PgCert 12 months part-time

Content: This programme emphasises the application of advanced techniques and packages to solve complex engineering problems. It offers students a broad range of subjects across the mechanical engineering disciplines in order to work in various industrial sectors.

Candidates shall be required to attend the following designated programme of courses:

Year 1

EG556E Finite Element Methods (15 credit points)
EG55Q2 Engineering Risk and Reliability Analysis (15 credit points)
EG503G Computational Fluid Dynamics (15 credit points)
EM501A Advanced Composite Materials (15 credit points)

Year 2

EG556T Mathematical Optimisation (15 credit points)

Plus one from the following:

EG55G9 Riser Systems and Hydrodynamics (15 credit points)
EG552V Marine and Wind Energy (15 credit points)

Plus two from the following:

EG501G Fire and Explosion (15 credit points)
EG506F Structural Vibrations (15 credit points)
EG5077 Project Management (15 credit points)

Year 3

EG555N MSc Individual Project (60 credit points)

Assessment: By a combination of written examination and course work as prescribed for each course. In addition MSc candidates must submit a dissertation on their individual project, and may be required to undergo an oral examination. The Degree of MSc shall not be awarded to a candidate who fails to achieve a CGS Grade of D3 or above in the individual project, irrespective of their performance in other courses.