# ADVANCED MECHANICAL ENGINEERING (ON-CAMPUS) (SEPTEMBER START) (MSc/PgDip/PgCert)

#### 57H300B1/61H300VX/62H300VZ

Duration: MSc 12 months full-time; PgDip 9 months full-time; PgCert 4 months full-time

The course can be studied full-time on campus

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 sector

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

#### Stage 1

PD5006	Getting Started at the University of Aberdeen (0 credit points)
EG501V	Computational Fluid Dynamics (15 credit points)
EG501S	Numerical Simulation of Waves (15 credit points)
EM501Q	Advanced Composite Materials (15 credit points)

Plus one from the following:

EG5071	Fire and Explosion (15 credit points)
EG50T9	Structural Vibrations (15 credit points)
EG5067	Project Management (15 credit points)

## Stage 2

EG55M1	Finite Element Methods (15 credit points)
EG551T	Mathematical Optimisation (15 credit points)
EG55P6	Engineering Risk and Reliability Analysis (15 credit points)

Plus one from the following:

EG55F9	Riser Systems and Hydrodynamics (15 credit points)
EG552U	Marine and Wind Energy (15 credit points)

### Stage 3

EG59F1 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.