

**ADVANCED STRUCTURAL ENGINEERING (SEPTEMBER START) (MSc/PgDip/PgCert)**  
**57H21SB1/ 61H21SVX/ 62H21SVZ**

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

*Content:*

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

Stage 1

EM501Q Advanced Composite Materials (15 credit points)  
EG50T9 Structural Vibration (15 credit points)

*Plus two from the following:*

EA50JG Offshore Structural Design (15 credit points)  
EG5071 Fire and Explosion Engineering (15 credit points)  
EG501V Computational Fluid Dynamics (15 credit points)

Stage 2

EG551T Mathematical Optimisation (15 credit points)  
EG552R Lightweight Structures (15 credit points)

*Plus two from the following:*

EG55F9 Riser Systems and Hydrodynamics (15 credit points)  
EG55P6 Engineering Risk and Reliability Analysis (15 credit points)  
EG55M1 Finite Element Methods (15 credit points)

Stage 3

EG5917 Individual Project in Advanced Structural Engineering (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.