## SAFETY & RELIABILITY ENGINEERING (MSc/PgDip/PgCert)

## 57H1SRB1/61H1SRVX /62H1SRVZ

Duration: 12 months full time (MSc) & 24 months part time (MSc)

*Content:* The aim of the programme is to provide an opportunity for graduate engineers to develop a career in the general area of safety and reliability engineering and risk management.

Full-time students will be required to undertake a project commencing in May and to submit their work in September. Students will, where possible, undertake this while on an industrial placement. The subject for a student's dissertation will be chosen following discussion between staff and the student and in the light of placement availability. Part-time students will carry out a project during their final year of study.

## FULL TIME ROUTE

Stage 1

- EG50S1 Fundamental Safety Engineering and Risk Management Concepts (15 credit points)
- EG5060 Statistics and Probability for Safety, Reliability & Quality (15 credit points)
- EG5071 Fire and Explosion Engineering (15 credit points)
- EG50F8 Subsea Integrity (15 credit points)

Stage 2

- EG5511 Advanced Methods for Risk and Reliability Assessment (15 credit points)
- EG5558 Applied Risk Analysis and Management (15 credit points)
- EG55P8 Process Design, Layout & Materials (15 credit points)
- EG55P9 Human Factors Engineering (15 credit points)

Stage 3

EG5906 Safety Engineering Individual Project (60 credit points)

## PART TIME ROUTE

Year 1

- EG50S1 Fundamental Safety Engineering and Risk Management Concepts (15 credit points)
- EG5060 Statistics and Probability for Safety, Reliability & Quality (15 credit points)
- EG5511 Advanced Methods for Risk and Reliability Assessment (15 credit points)
- EG5558 Applied Risk Analysis and Management (15 credit points)

<u>Year 2</u>

- EG5071 Fire and Explosion Engineering (15 credit points)
- EG50F8 Subsea Integrity (15 credit points)
- EG55P8 Process Design, Layout & Materials (15 credit points)
- EG55P9 Human Factors Engineering (15 credit points)
- EG5906 Safety Engineering Individual Project (60 credit points) (this course continues into Year 3)

Year 3

EG5906 Safety Engineering Individual Project (60 credit points)

Assessment: By written examination and course work as prescribed for each course. In addition, MSc candidates must submit a dissertation 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.