# SAFETY & RELIABILITY ENGINEERING FOR OIL AND GAS (MSc/PgDip/PgCert) 57H12GB1/61H12GVX/62H12GVZ

Duration: 12 months full-time or -27 - 60 months part-time.

Content: The aims of the programme are to provide education and training at postgraduate level for graduate engineers in the general area of safety, reliability and risk management. Candidates shall be required to attend the following designated programme of courses:-

Full-time students will be required to undertake a project commencing in June 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)

EG50R1 Offshore Structures & Subsea Systems (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)

### Year 2

EG5071 Fire and Explosion Engineering (15 credit points)

EG55P8 Process Design, Layout & Materials (15 credit points)

EG55P9 Human Factors Engineering (15 credit points)

EG50R1 Offshore Structures & Subsea Systems (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.