

El member £2,585.00 inc VAT Non-member £2,820.00 inc VAT\*  
\*includes complimentary Affiliate membership to the Energy Institute

Successful oil and gas companies constantly review, value and risk their assets with a view to optimising the overall performance of their asset portfolio. This activity requires a strategic approach to managing uncertainty, exploiting synergies and ensuring they maintain a balanced and diversified mix of assets.

Modern portfolio techniques involve the construction of sophisticated models to value risk and characterise alternative combinations of assets. Such models can provide a range of graphical displays to aid decision-making, such as feasible envelopes and efficient frontiers defined in terms of financial and non-financial metrics over defined planning horizons. However, in order to use such techniques effectively it is important to understand their theoretical basis and practical consequences. Many companies still fail to apply portfolio optimisation techniques objectively, due to poorly constructed models, lack of understanding of potential asset interactions and a range of human and corporate organisational issues.

Using portfolio management techniques to make successful decisions can only be achieved with confidence if comprehensive technical, financial and risk assessment and ranking of the individual assets are involved.

This course addresses portfolio management from theoretical and practical perspectives applicable to assets from along the oil and gas supply chain. Exercises concentrate mainly on upstream asset portfolios, but do address the involvement of mid-stream and downstream assets and other non-petroleum energy assets in the context of balanced portfolios. Course materials include presentations, exercises and discussions facilitating delegate participation. The course information should help delegates to identify and select appropriate portfolio management techniques to suit their particular mix of assets.

## Course content:

### Day one – Asset portfolios require operational and strategic management

- Need for a portfolio approach
- Portfolio characterisation
- Strategic dimension to portfolio management
- Portfolio planning and rationalisation
- Capital allocation issues for asset portfolios
- Background to modern portfolio theory
- Rationalising exploration and production portfolios
- Winning portfolio combinations
- Organisational structures and corporate styles

### Day two – Asset portfolio analytical techniques and tools

- Selecting assets to fit with an existing portfolio
- Portfolio approach to implementing a quantified strategy
- Portfolio risk and probability of achieving key strategic targets
- Setting portfolio development objectives
- Strategic performance and implementation
- Case studies of optimising asset portfolios
- Filtering assets for portfolio selection
- Portfolio optimisation techniques
- Rank and cut, simplex and genetic optimisers

### Day three – Methodology and analysis for asset portfolio optimisation

- Competitive bidding theory versus practice
- Risk analysis, probabilities and expected values
- Portfolio management case study: a national oil company

- Rationalising an asset portfolio aided by simulation models
- Simulation analysis of a hypothetical portfolio of E&P assets
- Combining simulation, optimisation and risk and strategy analysis
- Portfolio approach to acquisition and divestment decisions
- Portfolio challenges and pitfalls to mergers and acquisitions
- Portfolio management case study: independent company

### Day four – integrating portfolio valuation, risk and the human dimension

- Key portfolio roles for estimating and forecasting
- Portfolio analysis tools: software options
- Contrasting the spectrum of possible oil and gas portfolios
- Qualitative value and risk assessment of third-party portfolios
- Analysing portfolio strategies from published reports
- Benchmarking portfolio performance
- Human factors: overcoming resistance to portfolio management
- Taking a global perspective to oil and gas portfolios
- Challenges to successful portfolio management
- Utilising efficient frontiers to guide portfolio decisions

#### Who should attend?

*This course is designed for a multi-disciplined professional audience drawn from portfolio, economic analysis, strategic planning, corporate, fiscal, financial and business development divisions of oil and gas companies, institutions financing such companies, and analysts of the oil and gas sector. The skills and industry insight provided by the course will be of value to corporate, portfolio and asset-based decision-makers.*

#### Attendees should include:

*Economic, technical and strategic analysts and managers involved in portfolio management; corporate and asset team members involved in acquisitions; disposals and optimisation of oil and gas*



# Registration form

To register, by post or fax, please complete this registration form in BLOCK CAPITALS and return it to the address below, together with payment of all fees.

Nick Wilkinson, EI Oil and Gas Training, Energy Institute, 61 New Cavendish Street, London W1G 7AR, UK  
 f: +44 (0)20 7255 1472

To register by email, please provide the same contact details (shown below), together with the relevant course details and send to: [nwilkinson@energyinst.org](mailto:nwilkinson@energyinst.org) To book online, visit: [www.energyinst.org](http://www.energyinst.org)

I am/my employer is a member of the EI and entitled to the EI member's rate. EI Membership Number: .....

Family name: ..... Mr/Mrs/Miss/Ms/Dr/Other: .....

Given name(s): ..... Name to be used on badge: .....

Job title or present position: .....

Company/Organisation: .....

Name and address against which an invoice should be raised: .....

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t: ..... f: .....

e: .....

Mailing address for joining instructions (if different to invoice address above): .....

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Please indicate if you have any particular dietary requirements: .....

I confirm that I have read and agree to the conditions of registration as specified in the General Information section.

Signature: ..... Date: .....

**Under UK Excise Regulations, delegates from all countries are required to pay VAT on any course taking place in the UK.**

Course Title: .....

Course date: ..... Cost of course: £ .....

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Course date: ..... Cost of course: £ .....

Less 10% discount for each **subsequent** delegate from the **same** company attending the **same** course on the **same** date £ .....

TOTAL PAYMENT £ .....

The total amount may be paid by Sterling Cheque or Draft drawn on a bank in the UK.

I enclose my remittance, made payable to the Energy Institute, for: £ .....inc VAT

To pay by Credit or Charge Card, circle appropriate card name and give card details below:



Card No: \_ \_ \_ \_ / \_ \_ \_ \_ / \_ \_ \_ \_ / \_ \_ \_ \_ Start Date \_ \_ / \_ \_ Expiry Date \_ \_ / \_ \_

Please enter your 3-digit\* security code above. This will be deleted upon authorisation. \*4-digits for Amex users.

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Signature: ..... Date: .....

# General information

## Payment

Full payment must be received before a place can be guaranteed. Under UK Excise Regulations, delegates from all countries are required to pay VAT on any event taking place in the UK. Please note that VAT may be liable to amendment. All prices are correct at the time of going to press, but may be subject to change without prior notice.

## Acknowledgement of registration

Confirmation of registration and a VAT receipt will be sent to all delegates. Joining instructions will be sent out prior to the start date of the course. If you have not received your acknowledgement seven days prior to the start date of the course, please contact EI Oil and Gas Training at the Energy Institute to confirm your booking.

## Language and course materials

All presentations, course materials and supporting documentation will be presented in English.

## Cancellation

In the event of a delegate cancelling, a refund of the registration fee less a 20% administration charge will be made provided that notice is received in writing at least 28 days before the date of the course. No refunds will be paid after that date. However, course papers, as supplied to attendees, will be provided after the event.

## Substitution

If you are unable to attend, a substitute delegate may attend in your place, provided that EI Oil and Gas Training is notified in advance.

## Enquiries

EI Oil and Gas Training,  
Energy Institute, 61 New Cavendish Street,  
London W1G 7AR, UK  
t: +44 (0)20 7467 7100 f: +44 (0)20 7255 1472  
e: [nwilkinson@energyinst.org](mailto:nwilkinson@energyinst.org)  
[www.energyinst.org](http://www.energyinst.org)

## About the course provider

The Energy Institute (EI) is the leading professional body for the energy industries, representing almost 12,000 professionals both nationally and internationally.

A Royal Charter membership organisation, the Energy Institute serves society with independence, professionalism and a wealth of expertise in energy matters, creating a home for energy professionals and a scientific and technical reservoir for industry. It is licensed by the Engineering Council (UK) to offer Chartered, Incorporated and Engineering Technician status to engineers.

The Energy Institute (EI) cannot accept any liability for any loss, cost or expense suffered or incurred by

any person arising from reason of war, including threat of war, riots and civil strife, terrorism or threats thereof, natural disaster, weather, fire, flood, drought, technical, mechanical or electrical breakdown within any premises visited by delegates in connection with the course, non provision of services provided by hotel companies or transport operators, industrial disputes, governmental action, regulations, or technical problems which may affect the services provided in connection with the event. The right to exclude any delegate, guest or substitution and to reject any application for registration is reserved. The Institute reserves the right to make any changes to the courses as considered necessary.

## DATA PROTECTION ACT

The EI will hold your personal data on its computer database. This information may be accessed, retrieved and used by the EI and its associates for normal administrative purposes. If you are based outside the European Economic Area (the 'EEA'), information about you may be transferred outside the EEA. The EI may also periodically send you information on membership, training courses, events, conferences and publications in which you may be interested. If you do not wish to receive such information, please tick this box

The EI would also like to share your personal information with carefully selected third parties in order to provide you with information on other events and benefits that may be of interest to you. Your data may be managed by a third party in the capacity of a list processor only and the data owner will at all times be the EI. If you are happy for your details to be used in this way, please tick this box