

Anatomy of LNG Shipping & Operations

1-5 June 2025
Maddingley Hall • Cambridge

Organised by



Cambridge Academy of Transport

11 Hinton Way • Great Shelford • Cambridge • CB22 5AX
Tel: +44 (0)1223 845242 • Mob: +44 (0)7802 223121
Email: enquiries@catz.co.uk • Website: www.catz.co.uk



Cambridge Academy of Transport

Registration Form

ANATOMY OF LNG SHIPPING & OPERATIONS

1-5 JUNE 2025

To register, please complete this form and send it by email to Tulika Singh at the number given below.

PARTICIPANT 1: Title _____	First name(s) _____
Family name _____	
Company position _____	
PARTICIPANT 2: Title _____	First name(s) _____
Family name _____	
Company position _____	
PARTICIPANT 3: Title _____	First name(s) _____
Family name _____	
Company position _____	
Company name _____	
Address _____	

Nature of business: _____	
Tel: _____ Fax: _____	
E-mail: _____	

Enclosed is a cheque Please invoice my Company I wish to pay by Credit Card (details below)

Seminar Fees: The fee of **£4,500** includes UK Value Added Tax, tuition, accommodation, all meals, documentation and a full social programme. Payment can be made by cheque, bankers draft or inter-bank transfer. Cheques should be made payable to Cambridge Academy of Transport in Sterling drawn on a Bank in the United Kingdom. Our Bank details are:

Barclays Bank Plc, 28 Chesterton Road, Cambridge CB4 3AZ, UK
Account Number: 60224553 Sort Code: 20-17-35
IBAN: GB32 BUKB 2017 3560 2245 53 SWIFTBIC: BUKGB22

Alternatively you can pay by credit card. We accept Visa, MasterCard and American Express. Please complete the details

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Card Number:	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Return this form to:

Tulika Singh, Course Organiser
Cambridge Academy of Transport
11 Hinton Way, Great Shelford
Cambridge CB22 5AX, United Kingdom

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Mob: +44 (0)7802 223121
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Unless otherwise indicated all sessions will be presented by Paul Veldhuizen and Keith Bainbridge with either one being the lead presenter.

Course Programme

Day 1: Sunday 01 June	
14:45 – 15:00	Welcome by Dr John Doviak, Managing Director of Cambridge Academy of Transport. <ul style="list-style-type: none">- - Introductions, Expectations- - Course Calendar, Social Events and Housekeeping Issues
15:00-16:00	Session 1: LNG - the Basis and the Basics <ul style="list-style-type: none">- Physical Properties, Heating Value, Conversion Factors- Fuel Oil Equivalent (FOE) – old and new formula- Liquefaction and Cryogenic Tank Containment Systems
16:00 - 16:15	break
16:15 – 17:15	Session 2: Origins and Evolution of LNG Ocean Transport <ul style="list-style-type: none">- Vessel development and trend towards “standardisation”- Propulsion systems: evolution, current trend and challenges with decarbonisation rules- Market evolution: towards commoditisation
18:00 onwards	Madingley Hall tour followed by dinner
Day 2: Monday 02 June	
08:30 – 08:45	Recap and reflection
08:45 – 10:00	Session 3: LNG Infrastructure <ul style="list-style-type: none">- Load and Discharge terminals (Tanks, Vapouriser, Manifold)- Floating terminals- Gas grid interface and non-hardware considerations-
10:00 – 10:30	Group photograph and break
10:30 – 11:15	Session 4: Cargo Handling, Equipment and Operations <ul style="list-style-type: none">- Pumps, Hoses, Compressors, Vaporisers, etc.- Tank Cycles: 5-year vs trading cycle - heel retention, gas-up and cool-down, tank and cargo conditioning- Quantity and Quality determination and Custody Transfer Process

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11:15 – 12:30	Session 5: LNG specific marine legislation <ul style="list-style-type: none"> - IMO and its main Conventions: How they apply to LNG transport and usage - Role of key NGOs: ISO Standards, Classification Societies, Industry Organisations (OCIMF, SIGTTO, GIIGNL, INTERTANKO, SGMF, et. al.)
12:30 – 13:30	Lunch
13:30 – 14:30	Session 6: Ship/Shore interface <ul style="list-style-type: none"> - Compatibility, Vessel vetting (SIRE) and clearance process - Safety Checklists, Roles and Responsibilities - Emergency Shut Down (ESD) Systems
14:30 – 14:45	break
14:45 – 15:45	Session 7: Decarbonisation – a challenge for the maritime industry <ul style="list-style-type: none"> - IMO 2030 CO2 and 2050 GHG Emission Targets - Pathways and increasing complexity towards compliance - Jargon Buster: EEDI, EEXI, SEEMP, etc. explained - LNG and alternative fuels (e.g., methanol, ammonia, hydrogen fuel cells)
15:45 – 16:00	break
16:00 – 17:15	Session 8: Decarbonisation - challenges for LNG shipping <ul style="list-style-type: none"> - Compliance issues for the steam turbine fleet - Managing Boil-off Gas and Methane slip in Otto-cycle vs high-pressure diesel engines; what are the alternatives?
17:15 – 17:30	Final round-up
19:30	International Evening
Day 3: Tuesday 03 June	
08:30 – 08:45	Recap and reflection
08:45 – 10:00	Session 9: Operational Expenditure (OPEX) <ul style="list-style-type: none"> - Key constituent parts - Crunch in repair & maintenance facilities - Trend in outsourced maintenance contracts and costs
10:00 – 10:10	break
10:10 – 11:10	Session 10: CAPEX <ul style="list-style-type: none"> - Yard selection and oversight – avoidable errors - Price sensitivity analysis - Trend in ownership and global orderbook analysis
11:10 – 11:20	break
11:20 – 12:30	Session 11: Workshop - The QE Mega order: Assessing its impact on the global LNG freight marker
12:30 – 13:30	Lunch

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13:30 – 14:30	Session 12: Introduction to freight economics <ul style="list-style-type: none"> - Hire vs Freight - Unit Cost and Time Charter Equivalent - Group Exercise: Calculate TCE and Ballast/Laden ratio
14:30 – 14:45	break
14:45 – 15:45	Session 13: Introduction to LNG specific freight economics <ul style="list-style-type: none"> - Impact of heel retention - Vessel scheduling, gas-up and cool-down requirements - Importance of Charterers Instructions and understanding Voyage Orders
15:45 – 16:00	break
16:00 – 17:15	Session 14: LNG Pricing and Hedging <ul style="list-style-type: none"> - Contract Pricing Formulas - Impact of Hub Pricing and Arbitrage - Price Hedging: basic principles and examples
17:15 – 17:30	Final round-up
Timing TBC	Guided tour of Cambridge, followed by dinner
Day 4: Wednesday 04 June	
08:30 – 08:45	Recap and reflection
08:45 – 10:00	Session 15: LNG Freight Exercise <ul style="list-style-type: none"> - Calculating nett earning outcomes under different chartering / freight trading scenarios
10:00 – 10:10	break
10:10 – 11:00	Session 15 cont'd: Evaluation / Discussion
11:00 – 11:10	break
11:10 – 12:30	Session 16: Demonstration of Voyage Cost Calculator <ul style="list-style-type: none"> - Evaluation of different vessel choices for an export project
12:30 – 13:30	Lunch
13:30 – 14:30	Session 17: Managing Freight Costs <ul style="list-style-type: none"> - Freight Book infrastructure - Calculating and structuring an LNG freight hedge
14:30 – 14:45	break
14:45 – 15:45	Session 18: LNG Freight Hedging <ul style="list-style-type: none"> - Demonstration of the Spark Commodities Platform
15:45 – 16:00	break
16:00 – 17:15	Session 19: Introduction to LNG Chartering <ul style="list-style-type: none"> - Origins and evolution of the Time Charter Format - Issues with Voyage Charter Formats - Chartering Strategy
17:15 – 17:30	Final round-up
Timing TBC	Course Dinner (details to follow)

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Day 5: Thursday 05 June	
08:30 – 08:45	Recap and reflection
08:45 – 10:00	Session 20: LNG Contract Structure <ul style="list-style-type: none">- Key Clauses and concepts- Evolution from long-term SPA to MSA and Confirmation Notices- Marine clauses and interaction with the Charter Party and vessel owner
10:00 – 10:10	break
10:10 – 12:30	Session 21: Detailed review of Shell LNGTime2 Clauses, led by David Chapman, Chartering Manager GasLog and co-author of the INTERTANKO Guide to LNG Chartering <ul style="list-style-type: none">-
12:30 – 13:30	Lunch
13:30 – 14:30	Session 22: Practical Chartering Q&A Session <ul style="list-style-type: none">- Includes Disputes and their resolution
14:30 – 14:45	break and final admin
14:45 – 15:15	Final Q&A and close

Programme subject to change