



## LNG Short Course: Technology and the LNG Chain - G-29

### COURSE

#### About the Course

This LNG Short Course is designed for participants requiring moderate technical coverage, coupled with information on LNG commerce and all parts of the LNG Value Chain. Over 5-days, the course covers technical LNG basics and facility operation topics, plus technical, design, and commercial issues. Selected exercises and syndicates are used to reinforce the main topics of LNG trade and technology. In-house versions are available with either increased technical and operational emphasis or increased project and development emphasis.

More in-depth coverage for technical, production, and processing personnel is available in our 10-day course, G-4 LNG, Gas Conditioning and Processing - LNG emphasis.

*"It was everything I wanted to learn and more. Excellent course and instructor."* - Technical Service Engineer, United States

*"Thanks very much for the wonderful course! It was an absolute pleasure learning for the instructor!"* - Refinery Technician, Australia

#### Target Audience

Commercial and managerial staff looking for a concise overview; engineers new to the LNG industry; operations supervision staff and senior plant personnel; specialists looking to broaden their general knowledge of LNG; and staff involved in LNG commerce and interested in LNG technical fundamentals.

#### You Will Learn

- What is LNG, why it is produced, and what is the current status of the industry
- LNG facilities world-wide
- The LNG chain and impact of contractual issues on LNG plant design and operation; LNG pricing
- A survey of commercial and contractual issues
- Project costs, feasibility, development, and issues
- Some technical fundamentals of gas processing, such as molecular weight, heating value, Wobbe Index, vapor pressure, multi-component mixtures, thermodynamics
- Refrigeration: single and multi-component refrigeration cycles
- Technologies used in the production of LNG for base-load and small scale production, issues relating to technology selection, and operation

- Main equipment used in the production of LNG: heat exchangers, compressors and drivers used for LNG, pumps, and turbo expanders
- To apply knowledge of LNG gas pretreatment, drying, and refrigeration
- About LNG storage, shipping, and terminals, sizing basis, and small scale tanks
- Types of LNG carriers, marine management issues, and LNG transfer
- LNG importing, regasification of LNG and distribution to consumers, basis for sizing, technology selection, and energy integration
- New developments: development of off-shore LNG operations to regasification and liquefaction; coal seam gas project issues
- Site selection and HSSE considerations

## Course Content

- What LNG is and where it comes from
- Physical properties of LNG
- Vapor-liquid equilibrium behavior of LNG and refrigerants
- Gas pre-treatment
- Heat exchangers
- Refrigeration
- Rotating machinery
- Liquefaction processes
- LNG storage
- LNG shipping
- LNG importing

## Product Details

Categories: [Midstream](#)

Disciplines: [Gas Processing](#)

Levels: [Basic](#)

Product Type: [Course](#)

Formats Available: [In-Classroom](#) [Virtual](#)

Instructors: [John Morgan](#) [John C. Bourdon](#) [Gerard Hageman](#)

## In-Classroom Format

8 Jul '24 12 Jul '24 - | Course | In-Classroom (in Houston)

\$4,610.00

11 Nov '2415 Nov '24- | Course | In-Classroom (in Perth)\$5,500.00

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Virtual Format

9 Sep '2420 Sep '24- | Course | Virtual ( Houston UTC)\$3,970.00

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