LNG Terminal Operations Technician Foundation

GExperts Learning Academy | TV-X29 | TV | 3-12 months

Course overview

3-12 months TV programme focused on LNG Terminal Operations Technician Foundation, using energy-sector cases and applied decisions.

Designed for: Trade entrants with supervised practical assessment

Learning outcomes

- Explain core principles and terminology for LNG Terminal Operations Technician Foundation.
- Interpret an applied case using evidence and stated assumptions.
- Identify risks, safeguards, role boundaries and escalation points.
- Prepare a clear recommendation for a multidisciplinary audience.

Course guide

Work through each module objective, lesson and teaching note, complete the applied activity and assessment, then use the separate Academy practice page for practice questions and answer feedback.

Separate practice questions:
https://www.globalexpertsconsultoria.com/training/academy/courses/questions/?course=TV-X29

Academic and certification status

Draft learning resource for study and review. It does not confer accreditation, external certification, a regulated qualification, professional licence, safety-critical competence or site authorisation. Confirm approvals, current laws, standards, approved procedures and awarding-body requirements before delivery.

Module 1: LNG Terminal Operations Technician Foundation: Core Concepts

Learning objectives

- Explain lng terminal operations technician foundation: core concepts, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of LNG Terminal Operations Technician Foundation: Core Concepts
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. LNG Terminal Operations Technician Foundation: Core Concepts describes a practical part of LNG Terminal Operations Technician Foundation. Learners connect the principles to asset performance, people, operational risk, project value and local context.

Decision logic. Review the objective, evidence, limits, interfaces and applicable controls for lng terminal operations technician foundation: core concepts. Decisions require current information, role-appropriate authority, competent review and documented assumptions.

Worked example. Use an applied Namibia-relevant case in which a team plans lng terminal operations technician foundation: core concepts while balancing safety, integrity, schedule, cost, environmental protection and local capability.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Prepare a decision brief for lng terminal operations technician foundation: core concepts: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Model answer guide. A sound response defines scope; uses current, traceable evidence; applies approved requirements and controls; records assumptions; assigns competent owners; checks interfaces; and communicates a measurable decision with an escalation path.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Prepare a decision brief for lng terminal operations technician foundation: core concepts: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Module 2: Separation gas processing and utilities

Learning objectives

- Explain separation gas processing and utilities, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of Separation gas processing and utilities
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. Production fluids are separated into oil, gas and water streams before further treatment. Gas compression, dehydration, oil stabilisation and utilities support product specifications and safe operation. Explain process flow diagrams before introducing instrument-level drawings.

Decision logic. Mass balance links input, output and accumulation. A bottleneck in power, cooling or compression can limit oil production. Product quality, emissions and integrity constrain throughput. Actual settings and alarm responses must follow approved procedures.

Worked example. A separator receives 100 mass units/hour; 55 leave as oil, 20 as gas and 25 as water, with no accumulation.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Reconcile a second balance with a missing stream and discuss measurement uncertainty.

Model answer guide. Total output plus accumulation must equal input; unexplained imbalance requires data checking.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Reconcile a second balance with a missing stream and discuss measurement uncertainty.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Module 3: LNG Terminal Operations Technician Foundation: Systems and Int

Learning objectives

- Explain lng terminal operations technician foundation: systems and interfaces, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of LNG Terminal Operations Technician Foundation: Systems and Interfaces
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. LNG Terminal Operations Technician Foundation: Systems and Interfaces describes a practical part of LNG Terminal Operations Technician Foundation. Learners connect the principles to asset performance, people, operational risk, project value and local context.

Decision logic. Review the objective, evidence, limits, interfaces and applicable controls for lng terminal operations technician foundation: systems and interfaces. Decisions require current information, role-appropriate authority, competent review and documented assumptions.

Worked example. Use an applied Namibia-relevant case in which a team plans lng terminal operations technician foundation: systems and interfaces while balancing safety, integrity, schedule, cost, environmental protection and local capability.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Prepare a decision brief for lng terminal operations technician foundation: systems and interfaces: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Model answer guide. A sound response defines scope; uses current, traceable evidence; applies approved requirements and controls; records assumptions; assigns competent owners; checks interfaces; and communicates a measurable decision with an escalation path.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Prepare a decision brief for lng terminal operations technician foundation: systems and interfaces: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Module 4: Marine operations and station keeping

Learning objectives

- Explain marine operations and station keeping, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of Marine operations and station keeping
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. Floating facilities and vessels maintain position through mooring, dynamic positioning or combinations appropriate to their design. Marine operations depend on weather, equipment condition and personnel competence. Explain station-keeping failure consequences for risers, lines and transfer operations.

Decision logic. Operating windows are vessel- and task-specific. Review weather forecasts, redundancy, assurance and abort criteria before work. Do not use classroom numbers as vessel limits. Interface plans should define who can pause the operation and how changes are communicated.

Worked example. An operation remains within yesterday's forecast but the latest forecast deteriorates during the planned work window.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Prepare a go-or-defer briefing identifying information needed, authority and contingency.

Model answer guide. Use current metocean data, approved limits, equipment status and safe disengagement planning.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Prepare a go-or-defer briefing identifying information needed, authority and contingency.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Module 5: Emergency preparedness and command

Learning objectives

- Explain emergency preparedness and command, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of Emergency preparedness and command
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. Emergency planning identifies credible scenarios, warning, command, communications, muster, evacuation, medical support and external interfaces. Responsibilities and fallback communications should be understood before an event. Awareness differs from emergency-team qualification.

Decision logic. Use tabletop exercises with timed injects, observer records and debrief actions. Test loss of communications or unavailable resources. Never simulate an actual distress call or activate real emergency equipment without authorised arrangements.

Worked example. A fictional offshore incident interrupts the primary communication link during a weather restriction.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Run a tabletop with incident controller, operations, logistics and communications roles.

Model answer guide. Prioritise people, establish command, verify information, use planned backup channels and document decisions.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Run a tabletop with incident controller, operations, logistics and communications roles.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Module 6: LNG Terminal Operations Technician Foundation: Data and Perfor

Learning objectives

- Explain lng terminal operations technician foundation: data and performance, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of LNG Terminal Operations Technician Foundation: Data and Performance
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. LNG Terminal Operations Technician Foundation: Data and Performance describes a practical part of LNG Terminal Operations Technician Foundation. Learners connect the principles to asset performance, people, operational risk, project value and local context.

Decision logic. Review the objective, evidence, limits, interfaces and applicable controls for lng terminal operations technician foundation: data and performance. Decisions require current information, role-appropriate authority, competent review and documented assumptions.

Worked example. Use an applied Namibia-relevant case in which a team plans lng terminal operations technician foundation: data and performance while balancing safety, integrity, schedule, cost, environmental protection and local capability.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Prepare a decision brief for lng terminal operations technician foundation: data and performance: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Model answer guide. A sound response defines scope; uses current, traceable evidence; applies approved requirements and controls; records assumptions; assigns competent owners; checks interfaces; and communicates a measurable decision with an escalation path.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Prepare a decision brief for lng terminal operations technician foundation: data and performance: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Module 7: LNG Terminal Operations Technician Foundation: Applied Case

Learning objectives

- Explain lng terminal operations technician foundation: applied case, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of LNG Terminal Operations Technician Foundation: Applied Case
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. LNG Terminal Operations Technician Foundation: Applied Case describes a practical part of LNG Terminal Operations Technician Foundation. Learners connect the principles to asset performance, people, operational risk, project value and local context.

Decision logic. Review the objective, evidence, limits, interfaces and applicable controls for lng terminal operations technician foundation: applied case. Decisions require current information, role-appropriate authority, competent review and documented assumptions.

Worked example. Use an applied Namibia-relevant case in which a team plans lng terminal operations technician foundation: applied case while balancing safety, integrity, schedule, cost, environmental protection and local capability.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Prepare a decision brief for lng terminal operations technician foundation: applied case: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Model answer guide. A sound response defines scope; uses current, traceable evidence; applies approved requirements and controls; records assumptions; assigns competent owners; checks interfaces; and communicates a measurable decision with an escalation path.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Prepare a decision brief for lng terminal operations technician foundation: applied case: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Module 8: LNG Terminal Operations Technician Foundation: Communication

Learning objectives

- Explain lng terminal operations technician foundation: communication and escalation, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of LNG Terminal Operations Technician Foundation: Communication and Escalation
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. LNG Terminal Operations Technician Foundation: Communication and Escalation describes a practical part of LNG Terminal Operations Technician Foundation. Learners connect the principles to asset performance, people, operational risk, project value and local context.

Decision logic. Review the objective, evidence, limits, interfaces and applicable controls for lng terminal operations technician foundation: communication and escalation. Decisions require current information, role-appropriate authority, competent review and documented assumptions.

Worked example. Use an applied Namibia-relevant case in which a team plans lng terminal operations technician foundation: communication and escalation while balancing safety, integrity, schedule, cost, environmental protection and local capability.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Prepare a decision brief for lng terminal operations technician foundation: communication and escalation: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Model answer guide. A sound response defines scope; uses current, traceable evidence; applies approved requirements and controls; records assumptions; assigns competent owners; checks interfaces; and communicates a measurable decision with an escalation path.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Prepare a decision brief for lng terminal operations technician foundation: communication and escalation: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Module 9: LNG Terminal Operations Technician Foundation: Knowledge Che

Learning objectives

- Explain lng terminal operations technician foundation: knowledge check, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of LNG Terminal Operations Technician Foundation: Knowledge Check
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. LNG Terminal Operations Technician Foundation: Knowledge Check describes a practical part of LNG Terminal Operations Technician Foundation. Learners connect the principles to asset performance, people, operational risk, project value and local context.

Decision logic. Review the objective, evidence, limits, interfaces and applicable controls for lng terminal operations technician foundation: knowledge check. Decisions require current information, role-appropriate authority, competent review and documented assumptions.

Worked example. Use an applied Namibia-relevant case in which a team plans lng terminal operations technician foundation: knowledge check while balancing safety, integrity, schedule, cost, environmental protection and local capability.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Prepare a decision brief for lng terminal operations technician foundation: knowledge check: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Model answer guide. A sound response defines scope; uses current, traceable evidence; applies approved requirements and controls; records assumptions; assigns competent owners; checks interfaces; and communicates a measurable decision with an escalation path.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Prepare a decision brief for lng terminal operations technician foundation: knowledge check: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Module 10: LNG Terminal Operations Technician Foundation: Competence R

Learning objectives

- Explain lng terminal operations technician foundation: competence review, interpret a case, select appropriate controls and justify a documented decision.

Lessons

1. Purpose and key terms of LNG Terminal Operations Technician Foundation: Competence Review
2. Systems and operating context
3. Evidence, assumptions and decision gates
4. Hazards, safeguards and escalation
5. Applied case: LNG Terminal Operations Technician Foundation

Detailed teaching notes

Teaching notes

Core explanation. LNG Terminal Operations Technician Foundation: Competence Review describes a practical part of LNG Terminal Operations Technician Foundation. Learners connect the principles to asset performance, people, operational risk, project value and local context.

Decision logic. Review the objective, evidence, limits, interfaces and applicable controls for lng terminal operations technician foundation: competence review. Decisions require current information, role-appropriate authority, competent review and documented assumptions.

Worked example. Use an applied Namibia-relevant case in which a team plans lng terminal operations technician foundation: competence review while balancing safety, integrity, schedule, cost, environmental protection and local capability.

Facilitator prompts. Ask learners to distinguish verified facts from assumptions, identify who has decision authority, name stop-work triggers and state what evidence could change their recommendation. Compare technical, HSE, commercial and community perspectives.

Activity. Prepare a decision brief for lng terminal operations technician foundation: competence review: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Model answer guide. A sound response defines scope; uses current, traceable evidence; applies approved requirements and controls; records assumptions; assigns competent owners; checks interfaces; and communicates a measurable decision with an escalation path.

Assessment evidence. Score accuracy (30%), use of evidence (20%), safeguards (20%), analysis (20%) and communication (10%).

Applied activity

Prepare a decision brief for lng terminal operations technician foundation: competence review: scope, evidence, assumptions, hazards, safeguards, owner, decision gate and escalation trigger.

Assessment

Formative: 10-question practice quiz with answer feedback

Summative: Applied decision brief or practical case assessed against the rubric; proposed pass mark 70%, subject to academic approval.

Practice

Use the separate Academy practice questions and answer key page for this module.

Facilitator close-out and resources

Facilitator close-out

Record attendance, assessment evidence, learner support needs, incidents and improvement actions according to approved provider processes. Do not sign learners off for regulated or safety-critical work without the authorised assessment and certification route.

Resources and references

- Supplied GExperts/IUM reference materials; verify reuse rights and currentness.
- Current applicable Namibian legislation, standards and approved site procedures supplied by the provider.
- Case worksheet and instructor slides must be produced and reviewed before course release.