



Well Site Supervisor Development Program

COURSE

About the Course

This program is designed to develop your employees into the functional role of a Well Site Supervisor. By combining self-paced online activities with live virtual instruction and practical workshop application, this program equips your employees to be revenue generating team leaders at the well site. Using PetroSkills' PetroAcademy application and/or delivered real-time virtual sessions via WebEx, this program gives you the confidence that your employees are being developed using proven industry-validated competencies for this critical role.

Target Audience

- Field supervisors and junior field supervisors who are being developed to be well site supervisors
- Entry-level well site field personnel
- Experienced personnel who are cross-training to move into a supervisory role leading operations at the well site

You Will Learn

- Well Construction Foundations
- Descriptive Formation Fundamentals
- Onsite Fluids Management
- Casing and Cementing Operations
- Directional /Horizontal Drilling Operations
- Drilling Optimization Operations
- Initial Completions and Well Testing Operations
- Interventions Operations
- Managing Wellsite Operations
- Crew Resource Management
- The Reduction of Unplanned Events Operations
- Basic Petroleum Economics
- Project Management for Upstream Field Development
- Comprehensive Review, Capstone Exercise & Testing

Course Content

| UNIT 1: Well Construction Foundations | Duration (hours) | Delivery Format |
|---|-------------------------|---|
| E&P Industry and Asset Life Cycle | 4.0 | Online Activity |
| Petroleum Geology | 2.5 | Online Activity |
| Hydrocarbon Reservoirs | 2.0 | Online Activity |
| Rock and Fluid Properties | 3.5 | Online Activity |
| Track One Overview-Detailed Participant Intro | 4.0 | Instructor-led (Virtual or F2F) |
| Surface/Subsurface Exploration | 3.0 | Online Activity |
| Drilling Operations and Well Completions | 3.0 | Online Activity |
| Defining Well Objectives | 1.0 | Online Activity |
| Production Principles | 4.5 | Online Activity |
| Office Hours - Q&A | 2.0 | Instructor-led (Virtual or F2F) |
| Drilling Rig Crews | 0.5 | Online Activity |
| Prepare to Spud - Operational Readiness | 0.5 | Online Activity |
| Back to Work Plan Discussion | 1.0 | Instructor-led (Virtual or F2F) |
| Unit 1 Recap | 2.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 1 | 2.0 | Online Activity |
| Debrief with participant managers | .75 | Instructor-led (Virtual) |

| UNIT 2: Descriptive Formation Fundamentals | Duration (hours) | Delivery Format |
|---|-------------------------|---|
| Introduction and Overview of Petrophysics | 5.0 | Online Activity |
| Mud Logging, Coring, and Cased Hole Operations | 4.5 | Online Activity |
| Porosity Logging (Density, Neutron, and Sonic) | 5.5 | Online Activity |
| Office Hours - Q&A | 2.0 | Instructor-led (Virtual or F2F) |
| Gamma Ray and Spontaneous Potential Logging | 2.5 | Online Activity |
| Resistivity Logging Tools and Interpretation | 3.5 | Online Activity |
| Special Petrophysical Tools: NMR and Image Logs | 2.0 | Online Activity |
| Office Hours - Q&A | 2.0 | Instructor-led (Virtual or F2F) |
| Back to Work Plan Discussion | 1.0 | Instructor-led (Virtual or F2F) |

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|------------------------|-----|---|
| Unit 2 Recap | 2.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 2 | 2.0 | Online Activity |

| UNIT 3: Onsite Fluids Management | Duration (hours) | Delivery Format |
|--|-----------------------------|---|
| Drilling Fluid Objectives and Functions | 0.5 | Online Activity |
| Drilling Fluid Types, Additives and Properties | 1.0 | Online Activity |
| Volumetric Accountability with Drilling Fluids | 1.0 | Online Activity |
| Fluid Chemical Properties and Measurements | 2.5 | Instructor-led (Virtual or F2F) |
| WBM Build Scenarios (Calculations) w Exercises | 2.0 | Instructor-led (Virtual or F2F) |
| Fluids Processing / Solids Control | 0.5 | Instructor-led (Virtual or F2F) |
| Solids Analysis of a Drilling Fluid (Tree) | 0.5 | Instructor-led (Virtual or F2F) |
| Shaker Screen Nomenclature and Labeling | 0.5 | Instructor-led (Virtual or F2F) |
| WBM Contaminations | 1.5 | Instructor-led (Virtual or F2F) |
| Electrical Stability Unit | .25 | Online Activity |
| Non-Aqueous Fluids | 2.0 | Instructor-led (Virtual or F2F) |
| Drilling Fluid Reports | 1.5 | Instructor-led (Virtual or F2F) |
| Waste Management | 2.0 | Instructor-led (Virtual or F2F) |
| Lost Circulation | 2.0 | Instructor-led (Virtual or F2F) |
| Drilling Fluid Impacts on the Technical Limit | 1.5 | Instructor-led (Virtual or F2F) |
| Back to Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |
| Unit 3 Recap | 4.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 3 | 2.0 | Online Activity |

| UNIT 4: Casing and Cementing Operations | Duration (hours) | Delivery Format |
|--|-------------------------|---|
| Characterizing the Drilling Environment | 3.75 | Online Activity |
| Primary and Remedial Cementing | 5.0 | Online Activity |
| Oilfield Casing | 2.25 | Online Activity |
| Casing Running Operations | 3.75 | Online Activity |
| Wellheads and Christmas Trees | 0.5 | Online Activity |
| All About Casing | 3.0 | Instructor-led (Virtual or F2F) |
| Wellhead Equipment, Casing Connections and Introduction to Primary Cementing | 3.0 | Instructor-led (Virtual or F2F) |
| Cement Calculations and Channeling | 3.0 | Instructor-led (Virtual or F2F) |
| Cement Casing Attachments | 3.0 | Instructor-led (Virtual or F2F) |
| Cement Considerations and Design | 2.0 | Instructor-led (Virtual or F2F) |
| Wellheads, Unit 4 Recap and Back-to-Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 4 | 2.0 | Online Activity |

| UNIT 5: Directional/Horizontal Drilling Operations | Duration (hours) | Delivery Format |
|---|-------------------------|---|
| Directional Drilling and Trajectory Design | 2.5 | Online Activity |
| Introduction, Planning | 4.0 | Instructor-led (Virtual or F2F) |
| Geosteering, Survey Instruments | 4.0 | Instructor-led (Virtual or F2F) |
| Types of Curves, Hole Cleaning | 4.0 | Instructor-led (Virtual or F2F) |
| Torque and Drag, Dogleg Severity, Methods of Deflection | 4.0 | Instructor-led (Virtual or F2F) |
| Unit 5 Recap | 2.0 | Instructor-led (Virtual or F2F) |
| Back-to-Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |

Post-Assessment Unit 5

2.0

Online Activity

UNIT 6: Drilling Optimization Operations**Duration
(hours)****Delivery Format**

Bits and Hydraulics

3.5

Online Activity

Drill String and BHA

3.0

Online Activity

Wellbore Drilling Excellence

4.0

Instructor-led
(Virtual or F2F)

Wellbore Limiters Case Studies

4.0

Instructor-led
(Virtual or F2F)

Bits and BHA

4.0

Instructor-led
(Virtual or F2F)

Introduction to Drillstring Design for Field Use

4.0

Instructor-led
(Virtual or F2F)

Pressure Management, Hydraulics, Hole Cleaning, MSE, Torque and Drag

4.0

Instructor-led
(Virtual or F2F)

Back-to-Work Plan Discussion

2.0

Instructor-led
(Virtual or F2F)

Unit 6 Recap: Assuring Wellbore Drilling Optimization (Loss Avoidance) and Sustainable Learning

2.0

Instructor-led
(Virtual or F2F)

Post-Assessment Unit 6

2.0

Online Activity

UNIT 7: Initial Completions and Well Testing**Duration
(hours)****Delivery Format**

Design Process for Completions and Workovers

3.5

Online Activity

Onshore Conventional Completions

4.0

Online Activity

Onshore Unconventional Completions

3.5

Online Activity

Office Hours - Q&A

1.0

Instructor-led
(Virtual or F2F)

Perforating

3.5

Online Activity

Formation Damage and Matrix Acidizing

3.0

Online Activity

Office Hours - Q&A

2.0

Instructor-led
(Virtual or F2F)

Sand Control

2.5

Online Activity

Hydraulic Fracturing

4.0

Online Activity

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|------------------------------|-----|---|
| Office Hours - Q&A | 2.0 | Instructor-led (Virtual or F2F) |
| Well Testing | 3.0 | Instructor-led (Virtual or F2F) |
| Back to Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |
| Unit 7 Recap | 2.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 7 | 2.0 | Online Activity |

| UNIT 8: Interventions Operations | Duration (hours) | Delivery Format |
|---|-----------------------------|---|
| Well Intervention | 3.0 | Online Activity |
| Flow Assurance and Production Chemistry | 5.0 | Online Activity |
| Office Hours - Q&A | 2.0 | Instructor-led (Virtual or F2F) |
| Production Logging | 3.0 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |
| Remedial Cementing Troubleshooting Examples | 3.0 | Instructor-led (Virtual or F2F) |
| Casing Side Tracks & Abandonment | 4.0 | Instructor-led (Virtual or F2F) |
| Back to Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |
| Unit 8 Recap | 2.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 8 | 2.0 | Online Activity |

| UNIT 9: Managing Wellsite Operations | Duration (hours) | Delivery Format |
|---|-----------------------------|------------------------|
| Well Construction Supply Chain Management | 2.5 | Online Activity |
| Well Site Management Part 1 - Logistics, Communication and Safety | 3.0 | Online Activity |
| Well Site Management Part 2 - Planning, Operations and Continuous Improvement | 3.5 | Online Activity |

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| Office Hours - Q&A | 2.0 | Instructor-led (Virtual or F2F) |
| Competency Development, Interpersonal Communications | 2.0 | Instructor-led (Virtual or F2F) |
| Time Management | 4.0 | Instructor-led (Virtual or F2F) |
| Problem Solving Facilitation | 4.0 | Instructor-led (Virtual or F2F) |
| Process Improvement | 4.0 | Instructor-led (Virtual or F2F) |
| Back to Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |
| Unit 9 Recap | 2.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 9 | 2.0 | Online Activity |

| UNIT 10: Crew Resource Management | Duration (hours) | Delivery Format |
|---|-----------------------------|---|
| Factors that Effect Human Performance, Crew Resource Management | 3.0 | Instructor-led (Virtual or F2F) |
| Situation Awareness and Decision Making | 3.0 | Instructor-led (Virtual or F2F) |
| Effective Communications and Teamwork | 3.0 | Instructor-led (Virtual or F2F) |
| Factors that Impact Human Performance | 3.0 | Instructor-led (Virtual or F2F) |
| Leadership | 3.0 | Instructor-led (Virtual or F2F) |
| Observation and Intervention | 3.0 | Instructor-led (Virtual or F2F) |
| Back to Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |
| Unit 10 Recap | 2.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 10 | 2.0 | Online Activity |

| UNIT 11: The Reduction of Unplanned Events | Duration (hours) | Delivery Format |
|---|-----------------------------|---|
| Well Performance Management | 2.5 | Online Activity |
| Stuck Pipe Prevention | 5.0 | Online Activity |
| Office Hours - Q&A | 2.0 | Instructor-led (Virtual or F2F) |
| Selected Readings - TRUE book | 4.0 | Online Activity |
| Reduction of Unscheduled Events, Such as Stuck Pipe, Lost Circulation | 4.0 | Instructor-led (Virtual or F2F) |
| Rig Repair, Downhole Equipment Failure, Drill String Failure, Drilling Jars and Investigative Reporting | 4.0 | Instructor-led (Virtual or F2F) |
| Back to Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |
| Unit 11 Recap | 2.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 11 | 2.0 | Online Activity |

| UNIT 12: Basic Petroleum Economics | Duration (hours) | Delivery Format |
|---|-----------------------------|---|
| Production Forecasting | 2.5 | Online Activity |
| Oil and Gas Pricing | 2.5 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |
| Cash Flow | 2.5 | Online Activity |
| Economic Decision Tools | 3.0 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |
| Risk and Uncertainty | 2.5 | Online Activity |
| Financing and Ownership | 2.0 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |
| Petroleum Industry Accounting | 2.5 | Online Activity |
| Budgeting | 2.0 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |

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|------------------------------|-----|---|
| Back to Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |
| Unit 12 Recap | 2.0 | Instructor-led (Virtual or F2F) |
| Post-Assessment Unit 12 | 2.0 | Online Activity |

| UNIT 13: Project Management for Upstream Field Development | Duration (hours) | Delivery Format |
|---|-----------------------------|---|
| Onshore Field Development Programs and Projects | 3.0 | Online Activity |
| Project Governance | 3.0 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |
| Project Resources and Organization | 2.5 | Online Activity |
| Scope Delivery | 2.5 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |
| Design Engineering Management | 3.0 | Online Activity |
| Acquiring Goods and Services | 2.5 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |
| Construction Management | 2.5 | Online Activity |
| Risk Management | 2.5 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |
| Cost Estimating for Facility Projects | 2.5 | Online Activity |
| Scheduling | 2.5 | Online Activity |
| Office Hours - Q&A | 1.0 | Instructor-led (Virtual or F2F) |
| Progress Measurement | 2.0 | Online Activity |
| Project Issues and Challenges - Session 1 | 3.0 | Instructor-led (Virtual or F2F) |
| Project Issues and Challenges - Session 2 | 5.0 | Instructor-led (Virtual or F2F) |
| Back to Work Plan Discussion | 2.0 | Instructor-led (Virtual or F2F) |
| Unit 13 Recap | 2.0 | Instructor-led (Virtual or F2F) |

| UNIT 14: Comprehensive Review, Capstone Exercise and Testing | Duration (hours) | Delivery Format |
|--|-------------------------|---|
| Session One Review: Units 1, 2, 12, 13 | 3.0 | Instructor-led (Virtual or F2F) |
| Session Two Review: Units 3, 4, 5 | 2.5 | Instructor-led (Virtual) |
| Session Three Review: Units 6, 7, 8 | 4 | Exercise-Instructor-led (Virtual) |
| Session Four Review: Units 9, 10, 11 | 4.5 | Exercise-Instructor-led (Virtual) |
| Best Well Composite Review, Program Review | 3.0 | Instructor-led (Virtual) |
| Best Well Composite Review, Program Review, Contingency Day | 3.0 | Instructor-led (Virtual) |
| Final Exam - Session 1 (Unit 1, 2, 12, 13) | 3.0 | Online Activity |
| Final Exam - Session 2 (Unit 3,4,5) | 3.0 | Online Activity |
| Final Exam - Session 3 (Unit 6,7,8) | 3.0 | Online Activity |
| Final Exam - Session 4 (Unit 9, 10, 11) | 3.0 | Online Activity |
| Invisible Loss Time | 1.0 | Instructor-led (Virtual or F2F) |
| Review Unit 7, 8 | 2.0 | Instructor-led (Virtual or F2F) |
| Perfect Well Exercise Program Review | 3.0 | Instructor-led (Virtual or F2F) |
| Final Exam | 8 | Online Activity |
| <i>Final Exam: An 8-hour test that involves applications and calculations can be developed at the end of the site supervision training milestone and a separate test can be developed at the end of the Well Planning training milestone</i> | | |

Product DetailsCategories: UpstreamDisciplines: Well Construction/Drilling

Levels:

Product Type: Course

Formats Available: Virtual In-Classroom

Instructors: Peter Aird James Bobo Kevin Cuyler Mason Gomez Charlie Holt Ken Lunsford
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