



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
Program Overview, Detailed Participant Introduction	4.0	Instructor-led(Virtual or Face-to-Face)
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 Face-to-Face)
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 Face-to-Face)
Unit 1 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
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 Face-to-Face)
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	4.0	Instructor-led(Virtual or Face-to-Face)
Back to Work Plan Discussion	1.0	Instructor-led(Virtual or Face-to-Face)

Unit 2 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
Post-Assessment Unit 2	2.0	Online Activity
Debrief with participant managers	.75	Instructor-led (Virtual)

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 Face-to-Face)
WBM Build Scenarios (Calculations) w Exercises	2.0	Instructor-led(Virtual or Face-to-Face)
Fluids Processing / Solids Control	0.5	Instructor-led(Virtual or Face-to-Face)
Solids Analysis of a Drilling Fluid (Tree)	0.5	Instructor-led(Virtual or Face-to-Face)
Shaker Screen Nomenclature and Labeling	0.5	Instructor-led(Virtual or Face-to-Face)
WBM Contaminations	1.5	Instructor-led(Virtual or Face-to-Face)
Electrical Stability Unit	.25	Online Activity
Non-Aqueous Fluids	2.0	Instructor-led(Virtual or Face-to-Face)
Drilling Fluid Reports	1.5	Instructor-led(Virtual or Face-to-Face)
Waste Management	2.0	Instructor-led(Virtual or Face-to-Face)
Lost Circulation	2.0	Instructor-led(Virtual or Face-to-Face)
Drilling Fluid Impacts on the Technical Limit	1.5	Instructor-led(Virtual or Face-to-Face)
Back to Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Unit 3 Recap	2.0	Instructor-led(Virtual or Face-to-Face)

Post-Assessment Unit 3	2.0	Online Activity
Debrief with participant managers	.75	Instructor-led (Virtual)

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	5.0	Online Activity
Wellheads and Christmas Trees	0.5	Online Activity
All About Casing	4.0	Instructor-led(Virtual or Face-to-Face)
Wellhead Equipment, Casing Connections and Introduction to Primary Cementing	4.0	Instructor-led(Virtual or Face-to-Face)
Cement Calculations and Channeling	4.0	Instructor-led(Virtual or Face-to-Face)
Cement Casing Attachments	4.0	Instructor-led(Virtual or Face-to-Face)
Cement Considerations and Design	2.0	Instructor-led(Virtual or Face-to-Face)
Wellheads, Unit 4 Recap and Back-to-Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Post-Assessment Unit 4	2.0	Online Activity
Debrief with participant managers	.75	Instructor-led (Virtual)

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 Face-to-Face)
Geosteering, Survey Instruments	4.0	Instructor-led(Virtual or Face-to-Face)

Types of Curves, Hole Cleaning	4.0	Instructor-led(Virtual or Face-to-Face)
Torque and Drag, Dogleg Severity, Methods of Deflection	4.0	Instructor-led(Virtual or Face-to-Face)
Unit 5 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
Back-to-Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Post-Assessment Unit 5	2.0	Online Activity
Debrief with participant managers	.75	Instructor-led(Virtual)

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 Face-to-Face)
Wellbore Limiters Case Studies	4.0	Instructor-led(Virtual or Face-to-Face)
Bits and BHA	4.0	Instructor-led(Virtual or Face-to-Face)
Introduction to Drillstring Design for Field Use	4.0	Instructor-led(Virtual or Face-to-Face)
Pressure Management, Hydraulics, Hole Cleaning, MSE, Torque and Drag	4.0	Instructor-led(Virtual or Face-to-Face)
Back-to-Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Unit 6 Recap: Assuring Wellbore Drilling Optimization (Loss Avoidance) and Sustainable Learning	2.0	Instructor-led(Virtual or Face-to-Face)
Post-Assessment Unit 6	2.0	Online Activity
Debrief with Participant Managers	.75	Instructor-led(Virtual or Face-to-Face)

UNIT 7: Initial Completions and Well Testing	Duration (hours)	Delivery Format
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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 Face-to-Face)
Perforating	3.5	Online Activity
Formation Damage and Matrix Acidizing	3.0	Online Activity
Office Hours - Q&A	2.0	Instructor-led(Virtual or Face-to-Face)
Sand Control	2.5	Online Activity
Hydraulic Fracturing	4.0	Online Activity
Office Hours - Q&A	2.0	Instructor-led(Virtual or Face-to-Face)
Well Testing	3.0	Instructor-led(Virtual or Face-to-Face)
Back to Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Unit 7 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
Debrief with Participant Managers	.75	Instructor-led(Virtual)
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 Face-to-Face)
Production Logging	3.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Remedial Cementing Troubleshooting Examples	3.0	Instructor-led(Virtual or Face-to-Face)
Casing Side Tracks & Abandonment	4.0	Instructor-led(Virtual or Face-to-Face)
Back to Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)

Unit 8 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
Debrief with Participant Managers	.75	Instructor-led(Virtual)
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
Office Hours - Q&A	2.0	Instructor-led(Virtual or Face-to-Face)
Competency Development, Interpersonal Communications	3.0	Instructor-led(Virtual or Face-to-Face)
Time Management	4.0	Instructor-led(Virtual or Face-to-Face)
Problem Solving Facilitation	4.0	Instructor-led(Virtual or Face-to-Face)
Process Improvement	4.0	Instructor-led(Virtual or Face-to-Face)
Back to Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Unit 9 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
Debrief with Participant Managers	.75	Instructor-led(Virtual)
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 Face-to-Face)
Situation Awareness and Decision Making	3.0	Instructor-led(Virtual or Face-to-Face)
Effective Communications and Teamwork	3.0	Instructor-led(Virtual

		or Face-to-Face)
Factors that Impact Human Performance	3.0	Instructor-led(Virtual or Face-to-Face)
Leadership	3.0	Instructor-led(Virtual or Face-to-Face)
Observation and Intervention	3.0	Instructor-led(Virtual or Face-to-Face)
Back to Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Unit 10 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
Debrief with Participant Managers	.75	Instructor-led(Virtual)
Post-Assessment Unit 10	2.0	Online Activity

UNIT 11: The Reduction of Unplanned Events	Duration (hours)	Delivery Format
Well Performance Management	4.0	Online Activity
Stuck Pipe Prevention	4.0	Online Activity
Office Hours - Q&A	2.0	Instructor-led(Virtual or Face-to-Face)
Selected Readings - TRUE book	4.0	Online Activity
Reduction of Unscheduled Events, Such as Stuck Pipe, Lost Circulation	4.0	Instructor-led(Virtual or Face-to-Face)
Rig Repair, Downhole Equipment Failure, Drill String Failure, Drilling Jars and Investigative Reporting	4.0	Instructor-led(Virtual or Face-to-Face)
Back to Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Unit 11 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
Debrief with Participant Managers	.75	Instructor-led(Virtual)
Post-Assessment Unit 11	2.0	Online Activity

UNIT 12: Basic Petroleum Economics	Duration (hours)	Delivery Format
Production Forecasting	4.0	Online Activity

Oil and Gas Pricing	4.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Cash Flow	4.0	Online Activity
Economic Decision Tools	4.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Risk and Uncertainty	4.0	Online Activity
Financing and Ownership	4.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Petroleum Industry Accounting	4.0	Online Activity
Budgeting	4.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Back to Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Unit 12 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
Debrief with Participant Managers	.75	Instructor-led(Virtual)
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	4.0	Online Activity
Project Governance	4.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Project Resources and Organization	4.0	Online Activity
Scope Delivery	4.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Design Engineering Management	4.0	Online Activity
Acquiring Goods and Services	4.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Construction Management	4.0	Online Activity

Risk Management	4.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Cost Estimating for Facility Projects	4.0	Online Activity
Scheduling	4.0	Online Activity
Office Hours - Q&A	1.0	Instructor-led(Virtual or Face-to-Face)
Progress Measurement	4.0	Online Activity
Project Issues and Challenges - Session 1	3.0	Instructor-led(Virtual or Face-to-Face)
Project Issues and Challenges - Session 2	5.0	Instructor-led(Virtual or Face-to-Face)
Back to Work Plan Discussion	2.0	Instructor-led(Virtual or Face-to-Face)
Unit 13 Recap	2.0	Instructor-led(Virtual or Face-to-Face)
Debrief with Participant Managers	.75	Instructor-led(Virtual)
Post-Assessment Unit 13	2.0	Online Activity

UNIT 14: Comprehensive Review, Capstone Exercise and Testing	Duration (hours)	Delivery Format
Best of the Best Total Well: <i>participants bring their own well data</i>	3.0	Exercise
Non productive time	1.0	Instructor-led(Virtual or Face-to-Face)
Review Units 3,5,6	1.5	Instructor-led(Virtual or Face-to-Face)
Identify non-productive time on participant wells	3.0	Exercise
Plateau time	1.0	Instructor-led(Virtual or Face-to-Face)
Review Unit 4	1.0	Instructor-led(Virtual or Face-to-Face)
Plateau time on participant wells	3.0	Exercise
Invisible Loss Time	1.0	Instructor-led(Virtual or Face-to-Face)
Review Units 7,8	2.0	Instructor-led(Virtual or Face-to-Face)
Perfect Well Exercise Program Review	3.0	Instructor-led(Virtual

		or Face-to-Face)
Final Exams	12	Online Activity

Product Details

Categories: Upstream

Disciplines: 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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