



Track 1: Well Site Supervisor Development Program



ABOUT THIS PROGRAM

The Competency Alliance is pleased to provide the Well Site Supervisor Development Program. 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 The Competency Alliance’s PetroAcademy application and/or delivered real-time virtual sessions, this program gives you the confidence that your employees are being developed using proven industry-validated competencies for this critical role.

Unit	Track 1: Well Site Supervisors*
1	Well Construction Foundations
2	Descriptive Formation Fundamentals
3	Onsite Fluids Management
4	Casing and Cementing Operations
5	Directional/Horizontal Drilling Operations
6	Drilling Optimization Operations
7	Initial Completions and Well Testing Operations
8	Interventions Operations
9	Managing Wellsite Operations
10	Crew Resource Management
11	The Reduction of Unplanned Events Operations
12	Basic Petroleum Economics
13	Project Management for Upstream Field Development
14	Comprehensive Review, Capstone Exercise, and Testing

PROGRAM INSTRUCTORS

The following The Competency Alliance world-class facilitators in well construction and drilling will teach this program:

James Bobo **Dan Gibson**
Kevin Cuyler **Stan Atnipp**
Charlie Holt **Kent Saugier**
Carlton Jensen **Mark Hackler**
Bob Sepulvado

For more information on these instructors, please visit:

www.petroskills.com/instructors

*A more detailed program outline is included at the end of this document.

DESIGNED FOR

- 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

PROGRAM HIGHLIGHTS

- Approximately 400 total hours of program work over a period of 14 months (recommended to provide Rig Time between units)
- Pre-test option allows learner to test out of what they know
- Self-paced modules provide flexibility to learners
- Live instructor-led virtual sessions and office hours provide opportunities to engage with the expert
- Assumption is that participants are on the rig when they are not taking the modules

Track 1: Well Site Supervisor Development Program

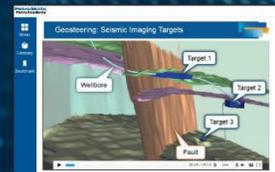
ONLINE LEARNING

The Competency Alliance's eLearning solutions combine industry knowledge, expertise, content, and technology to develop workforce competency. Each eLearning course integrates multiple self-paced learning activities, such as reading assignments, case studies, quizzes, and experiential activities. This combination of activities increases knowledge retention. Online learning further optimizes time away from work while incurring no travel expenses.

PROGRAM OVERVIEW



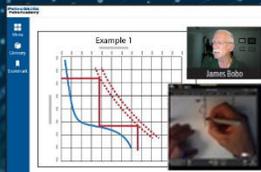
Video Content



Online Exercises



Virtual Instructor-Led Training



Back to Work Plans



Unit Debrief



For more information, please visit:
www.petroskills.com

Unit 1: Well Construction Foundations		
E&P Industry and Asset Life Cycle	4	Online Activity
Petroleum Geology Core	2.5	Online Activity
Hydrocarbon Reservoirs Core	2	Online Activity
Rock and Fluid Properties Core	3.5	Online Activity
Surface/Subsurface Exploration Core	3	Online Activity
Drilling Operations and Well Completions Core	3.25	Online Activity
Defining Well Objectives Core	1	Online Activity
Production Principles Core	5	Online Activity
Drilling Rig Crews Online Learning	0.5	Online Activity
Prepare to Spud – Operational Readiness Online Learning	0.5	Online Activity
Track 1 Program Overview & Office Hours – Q&A	4	Instructor-led Virtual
Office Hours – Q&A	2	Instructor-led Virtual
Back to Work Plan Discussion and Unit 1 Recap	3	Instructor-led Virtual
Post-Assessment Unit 1	2	Online Activity
Unit 1 Back to Work Plan Due		
Unit 2: Descriptive Formation Fundamentals		
Introduction and Overview of Petrophysics Core	5	Online Activity
Mud Logging, Coring, and Cased Hole Logging Operations Core	4.5	Online Activity
Porosity Logging (Density, Neutron, and Sonic) Core	5.5	Online Activity
Office Hours – Q&A	2	Instructor-led Virtual
Gamma Ray and Spontaneous Potential Logging Core	2.5	Online Activity
Resistivity Logging Tools and Interpretation Core	3.5	Online Activity
Special Petrophysical Tools: NMR and Image Logs Core	2	Online Activity
Office Hours – Q&A	4	Instructor-led Virtual
Back to Work Plan Discussion and Unit 2 Recap	3	Instructor-led Virtual
Post-Assessment Unit 2	2	Online Activity
Unit 2 Back to Work Plan Due		
Unit 3: Onsite Fluids Management		
Drilling Fluid Objectives and Functions	0.5	Online Activity
Drilling Fluid Types, Additives and Properties	0.75	Online Activity
Volumetric Accountability with Drilling Fluids	0.5	Online Activity
Fluid Chemical Properties and Measurements	4.5	Instructor-led Virtual
WBM Build Scenarios (Calculations) w/ Exercises		
Fluids Processing / Solids Control	3	Instructor-led Virtual
Solids Analysis of a Drilling Fluid (Tree)		
Shaker Screen Nomenclature and labeling		
WBM Contaminations	0.25	Online Activity
Electrical Stability Unit from IAM-DFS-1-ONL2		
Non-Aqueous Fluids	3.5	Instructor-led Virtual
Drilling Fluid Reports		
Waste Management	4	Instructor-led Virtual
Lost Circulation		

Drilling Fluid Impacts on the Technical Limit	4.5	Instructor-led Virtual
Back to Work Plan Discussion		
Unit 3 Recap	4	Instructor-led Virtual
Post-Assessment Unit 3	2	Online Activity
Unit 3 Back to Work Plan Due		
Unit 5: Directional/Horizontal Drilling Operations		
Directional Drilling and Trajectory Design Core	2.5	Online Activity
Introduction, Planning	4	Instructor-led Virtual
Geosteering, Survey Instruments	4	Instructor-led Virtual
Types of Curves, Hole Cleaning	4	Instructor-led Virtual
Torque and Drag, Dogleg Severity, Methods of Deflection	4	Instructor-led Virtual
Misc. & Unit 5 Recap and Back to Work Plan Discussion	4	Instructor-led Virtual
Post-Assessment Unit 5	2	Online Activity
Unit 5 Back to Work Plan Due		
Unit 4: Casing and Cementing Operations		
Characterizing the Drilling Environment Core	3.75	Online Activity
Primary and Remedial Cementing Core	5	Online Activity
Oilfield Casing Core	2.25	Online Activity
Casing Running Operations Core	3.75	Online Activity
Wellheads and Christmas Trees	0.5	Online Activity
All About Casing	4	Instructor-led Virtual
Wellhead Equipment, Casing Connections and Intro to Primary Cementing	4	Instructor-led Virtual
Cement Calculations and Channeling	4	Instructor-led Virtual
Cement Casing Attachments	4	Instructor-led Virtual
Cement Considerations and Design, Wellheads, Unit 4 Recap and BTW Plan Discussion	4	Instructor-led Virtual
Post-Assessment Unit 4	2	Online Activity
Unit 4 Back to Work Plan Due		
Unit 6: Drilling Optimization Operations		
Bits and Hydraulics Core	3.25	Online Activity
Drill String and BHA Core	3	Online Activity
Wellbore Drilling Excellence Fundamentals	4	Instructor-led Virtual
Wellbore Limiters Case Studies	4	Instructor-led Virtual
Bits and BHA	4	Instructor-led Virtual
Introduction to Drillstring Design for Field Use	4	Instructor-led Virtual
Pressure Management, Hydraulics, Hole Cleaning, MSE, Torque and Drag	4	Instructor-led Virtual
Unit 6 Recap (Assure Wellbore Drilling Optimization (loss avoidance) and Sustainable Learning) and BTW Plan Discussion	4	Instructor-led Virtual
Post-Assessment Unit 6	2	Online Activity
Unit 6 Back to Work Plan Due		
Unit 7: Initial Completions and Well Testing Operations		
	Duration (hrs)	Delivery Format
Design Process for Completions and Workovers Core	3.25	Online Activity

Onshore Conventional Completions Core	4	Online Activity
Onshore Unconventional Core	3.5	Online Activity
Office Hours – Q&A	3	Instructor-led Virtual
Perforating Core	3	Online Activity
Formation Damage and Matrix Acidizing Core	3	Online Activity
Office Hours – Q&A	3	Instructor-led Virtual
Sand Control Core	2.5	Online Activity
Hydraulic Fracturing Core	4	Online Activity
Office Hours – Q&A and Well Testing	3	Instructor-led Virtual
Back to Work Plan Discussion and Unit 7 Recap	3	Instructor-led Virtual
Post-Assessment Unit 7	2	Online Activity

Unit 7 Back to Work Plan Due

Unit 8: Interventions Operations	Duration (hrs)	Delivery Format
Well Intervention Core	3	Online Activity
Flow Assurance and Production Chemistry Core	5	Online Activity
Office Hours – Q&A	2	Instructor-led Virtual
Production Logging Core	3	Online Activity
Office Hours – Q&A	2	Instructor-led Virtual
Remedial Cementing Troubleshooting Examples	3	Instructor-led Virtual
Casing Side Tracks & Abandonment	3	Instructor-led Virtual
Back to Work Plan Discussion and Unit 8 Recap	4	Instructor-led Virtual
Post-Assessment Unit 8	2	Online Activity

Unit 8 Back to Work Plan Due

Unit 9: Managing Wellsite Operations	Duration (hrs)	Delivery Format
Well Construction Supply Chain Management Core	2.5	Online Activity
Well Site Management Part 1 – Logistics, Communication and Safety Core	3	Online Activity
Well Site Management Part 2 – Planning, Operations and Continuous Improvement Core	3.5	Online Activity
Office Hours – Q&A and Competency Development, Interpersonal Communications	4	Instructor-led Virtual
Time Management	4	Instructor-led Virtual
Problem Solving Facilitation	4	Instructor-led Virtual
Process Improvement	4	Instructor-led Virtual
Back to Work Plan Discussion and Unit 9 Recap	4	Instructor-led Virtual
Post-Assessment Unit 9	2	Online Activity

Unit 9 Back to Work Plan Due

Unit 10: Crew Resource Management	Duration (hrs)	Delivery Format
Factors that Affect Human Performance, Crew Resource Management	3	Instructor-led Virtual
Situation Awareness and Decision Making	3	Instructor-led Virtual
Effective Communications and Teamwork	3	Instructor-led Virtual
Factors that Impact Human Performance	3	Instructor-led Virtual
Leadership	3	Instructor-led Virtual

Observations and Intervention	3	Instructor-led Virtual
Back to Work Plan Discussion and Unit 10 Recap	4	Instructor-led Virtual
Post-Assessment Unit 10	2	Online Activity
Unit 10 Back to Work Plan Due		
Unit 11: The Reduction of Unplanned Events Operations		
Well Performance Management Core	2.5	Online Activity
Stuck Pipe Prevention Core	5	Online Activity
Office Hours – Q&A	4	Instructor-led Virtual
Selected Readings TRUE book	4	Online Activity
Reduction of Unscheduled Events, such as Stuck Pipe, Lost Circulation	4	Instructor-led Virtual
Rig Repair, Downhole Equipment Failure, Drill String Failure, Drilling Jars and Investigation Reporting	4	Instructor-led Virtual
Back to Work Plan Discussion and Unit 11 Recap	4	Instructor-led Virtual
Post-Assessment Unit 11	2	Online Activity
Unit 11 Back to Work Plan Due		
Unit 12: Basic Petroleum Economics		
Production Forecasting	2.5	Online Activity
Oil and Gas Pricing	2.5	Online Activity
Cash Flow	2.5	Online Activity
Economic Decision Tools	3.25	Online Activity
Risk and Uncertainty	2.5	Online Activity
Financing and Ownership	2	Online Activity
Petroleum Industry Accounting	2.5	Online Activity
Budgeting	1.75	Online Activity
Office Hours – Q&A	1	Instructor-led Virtual
Office Hours – Q&A	1	Instructor-led Virtual
Office Hours – Q&A	1	Instructor-led Virtual
Office Hours – Q&A	1	Instructor-led Virtual
Back to Work Plan Discussion and Unit 12 Recap	4	Instructor-led Virtual
Post-Assessment Unit 12	2	Online Activity
Unit 12 Back to Work Plan Due		
Unit 13: Project Management for Upstream Field Development		
Onshore Field Development Programs and Projects Core	2.75	Online Activity
Project Governance Core	2.75	Online Activity
Project Resources and Organization Core	2.5	Online Activity
Scope Delivery Core	2.5	Online Activity
Design Engineering Management Core	2.75	Online Activity
Acquiring Goods and Services Core	2.5	Online Activity
Construction Management Core	2.5	Online Activity
Risk Management Core	2.75	Online Activity
Cost Estimating for Facility Projects Core	2.5	Online Activity
Scheduling Core	2.5	Online Activity
Progress Measurement Core	2.5	Online Activity

Office Hours – Q&A	1	Instructor-led Virtual
Office Hours – Q&A	1	Instructor-led Virtual
Office Hours – Q&A	1	Instructor-led Virtual
Office Hours – Q&A	1	Instructor-led Virtual
Office Hours – Q&A and Project Issues and Challenges	4	Instructor-led Virtual
Project Issues and Challenges Continued	5	Instructor-led Virtual
Back to Work Plan Discussion and Unit 13 Recap	4	Instructor-led Virtual
Post-Assessment Unit 13	2	Online Activity
Unit 13 Back to Work Plan Due		
Unit 14: Comprehensive Review, Capstone Exercise & Testing		
Best of the Best Total Well: Participants bring their own well data- Min of 3–4 wells	4	Instructor-led Virtual
Non Productive Time and Review: Units 3, 5, 6	4	Instructor-led Virtual
Identify Non-Productive Time on Participant Wells and Plateau Time	4	Instructor-led Virtual
Review Unit 4 and Plateau Time on Participant Wells	4	Instructor-led Virtual
Invisible Loss Time and Review Unit 7, 8	4	Instructor-led Virtual
Final Exam - Session 1 (Unit 1, 2, 12, 13)	3	Online Activity
Final Exam - Session 2 (Unit 3, 4, 5)	3	Online Activity
Final Exam - Session 3 (Unit 6, 7, 8)	3	Online Activity
Final Exam - Session 4 (Unit 9, 10, 11)	3	Online Activity