



Casing Design Workshop - CDW - Virtual, Blended Delivery

COURSE

About the Course

This workshop will be delivered virtually through PetroAcademy. Each PetroAcademy offering integrates multiple learning activities, such as reading assignments, self-paced e-Learning, virtual instructor-led sessions, discussion forums, group exercises, case studies, quizzes, field trips, and experiential activities.

Activities include 22 hours of instructor-led, virtual training sessions, plus approximately 15 hours of self-paced work.

[See detailed schedule](#)

[See demo of online learning and instructor-led modules.](#)

Casing design is an integral part of a drilling engineer's work scope. This workshop provides a comprehensive overview of the design process, emphasizing the working stress approach currently used in the industry. Upon completion, participants will be able to select casing points, identify tubular requirements, loads, and present a design which incorporates life cycle considerations. Estimation of standard and special loads is covered in detail. Standard theories of strength and failure are discussed as well as advanced considerations for combined loads. Topics related to safe handling, running and hanging practices will additionally be covered.

Target Audience

Engineers, site supervisors, and technical managers responsible for casing design and/or review of the casing design for the full life cycle of the well. Participants should have at least one year of drilling-related experience AND be in a role that requires that they perform a detailed casing design.

You Will Learn

Participants will learn how to:

- Incorporate well objectives and offset data to assure wellbore integrity through its life cycle
- Incorporate risk mitigation strategies into well design
- Apply alternative design approach to address unanticipated torque/drag forces, etc.
- Conduct pre-job safety analysis and identify potential well control trouble spots
- Walk through key equipment and hazards associated with running, landing and cementing casing

Course Content

BLENDED LEARNING WORKSHOP STRUCTURE

This program is comprised of the following activities:

ILT = Virtual Instructor-led Training

OL = Online Learning Activity/Reading

EX = Online Learning Activity/Reading

Week	Activity	Hours (Approx)	Subject	Session Times (Central US time) GMT-5:00
Week 1	ILT	1.0	Opening Session: Overview	Tuesday, 25 Oct, 08:00-09:00
	OL	2.5	Introduction to Casing Design	
Week 2	ILT	3.0	Select Casing Depth and Sizes	Thursday, 27 Oct, 08:00-11:00
	OL	0.5	Select Casing Depth and Sizes	
	ILT	3.0	Calculate Collapse and Burst Loads	Tuesday, 1 Nov, 08:00-11:00
	OL	1.0	Calculate Collapse and Burst Loads	
	EX	1.0	Casing Load Determination	
Week 3	ILT	3.0	Make Preliminary Casing Selection, Adjust for Axial Loads	Thursday, 3 Nov, 08:00-11:00
	OL	1.0	Make Preliminary Casing Selection, Adjust for Axial Loads	
	EX	3.0	Casing Selection for Collapse, Burst, and Axial Design	
	ILT	4.0	Calculate Combined Load Effects, Adjust and Make Final Selection	Tuesday, 8 Nov, 08:00-12:00
	OL	4.0	Calculate Combined Load Effects, Adjust and Make Final Selection	

	EX	1.0	Final Casing Design with Combined Loads	
Week 4	ILT	3.0	Additional Load Considerations	Thursday, 10 Nov, 08:00-11:00
	OL	1.0	Additional Load Considerations	
	ILT	3.0	Workshop Wrap-up	Tuesday, 15 Nov, 08:00-11:00
Week 5	ILT	2.0	<i>Optional Session</i> - Creating Detailed Design for Portfolio Well	Thursday, 17 Nov, 08:00-10:00

Product Details

Categories: [Upstream](#)

Disciplines: [Well Construction/Drilling](#)

Levels: [Intermediate](#)

Product Type: [Course](#)

Formats Available: [Virtual](#)

Instructors: [David Tubbs](#) [James Bobo](#)