NTA GLOBAL TRAINING SCHEDULE

2021 Program - Nautilus Training Alliance

2021 NTA PROGRAM

The **Nautilus Training Alliance** 2021 Program is designed for current challenges. We have taken into account likely restrictions on travel and the reduced probability of meeting in various parts of the world and have designed a program with a blend of different delivery modes.

Online by Distance Learning

Scheduled training in this mode for 2021 provides certainty of delivery and ensure that our obligations to deliver a program are met. Courses are mostly timetabled to provide a global program which has the benefit of increasing the number of topics available in some subject areas and creating more distributed learning schedule.

In the Field

Field courses in US, UK, Ireland, Spain and France are scheduled in Q3 and Q4 2021.

In the Classroom

Classroom courses remain scheduled for topics that cannot be delivered online (e.g. core workshops and workstation based courses)

Nautilus Training Alliance

Best in class field, classroom, and online courses focusing on core skills development and current challenges facing the E&P industry. Courses delivered by instructors recognized as world class subject matter experts in their field (subsurface and operations), including industry leaders, professors, and distinguished lecturers.

Quality – Access to 'best in class' field, virtual classroom and classroom courses in a planned and reliable schedule utilizing many of the best known industry and academic instructors

Fully Supported - Full support for the provision of effective and reliable training (booking support, field logistics and HSSE, course facilitation)

Modern User Environment - Through The Learning Hub, our custom online learning platform, we have developed a modular architecture to enable delivery that meets the expectations of modern learners

Content Steering - Ability to influence technical and non-technical program content

Commercial Flexibility – A range of benefits to enhance membership pre-commitment and deliver greater value

Competency Levels

Awareness: Knowledge and comprehension of a subject or topic. Explaining and recalling important information, but this can still be as a dependent contributor at times.

Foundation: Application and analysis of topics. Problem-solving and interpretation, essentially as a self-starter, or individual, independent contributor.

Skilled: Integration, judgement and creativity. Making critical evaluations based on a sound knowledge and experience base, as a fully independent and highly competent individual contributor, who also can be an effective technical coach to colleagues and less experienced staff at times.

Mastery: Command of all aspects of a topic or skill. Commonly the individual is an authority, or subject matter expert, known throughout the industry and the company, frequently used as an expert consultant and technical coach resource globally for the organisation. This highest Competency level requires years of experience to achieve and will realistically never be achieved through course attendance alone.

KEY New Courses for 2021
Reintroduced Courses

January 15, 2021

DISTANCE LEARNING

Flexible Training Solutions - Structured on-line courses comprised of webinars and digital training materials provided through the RPS Energy Learning Hub.

Course Structure

Each course is divided into **sessions**, each comprising:

- Interactive live instructor led webinar
- Self-paced digital learning materials
- Exercises with instructor feedback

Scheduling

Courses consist of a series of **live webinar** sessions including instructor interaction, typically starting at 14:00 London and 08:00 Houston time.

A course is typically completed over a period of 1-2 weeks.

Webinars

Scheduled events provide the opportunity for instructors to present **learning materials**, answer questions from participants and review exercises.

Webinars are typically 2-3 hours long.

Learning Materials

Course manuals are in digital format, exercises are on-line and on paper.

All content is available through the **Learning Hub**.

learninghub.rpsgroup.com

The Learning Hub

The Learning Hub is the digital center for all Distance Learning courses, providing access to learning materials, events, resources and enabling participant and instructor interaction.

- Access to scheduled webinars is through a simple link on course pages
- All learning materials are hosted on the Learning Hub
- Instructors add content (exercise solutions, whiteboard downloads, feedback, etc) during the course
- Forums allow participants and instructors to interact during the course creating a fully interactive virtual class

Webinars

Instructor-led sessions are scheduled regularly throughout the course delivery period:

- Webinar facilitator (RPS staff) provides continuous technical support for instructor and webinar transmission
- Instructor presents with a screen: participants can view screen only or screen and presenter
- Interactive whiteboards are used with display downloaded and shared with participants.
- Course participants can contribute directly or via on-line chat facility moderated by the facilitator.
- Breakout rooms are used for small group exercises and discussions
- Webinars are recorded for later review by course participants

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
GEOPHYSICS AND SEISMIC INTERPRETATION							
D004a	The Essentials of Rock Physics and Seismic Amplitude Interpretation	Foundation	Distance Learning	Rob Simm	8 Sessions	22 Feb - 04 Mar	Virtual
	This course presents the physical basis for quantitative seismic interpretation within the context of hydrocarbon exploration and production. Key technologies are explained in a straightforward manner; with topics including rock physics analysis of log data, well ties, 1D and 2D seismic modelling, amplitude and AVO analysis, seismic inversion to rock properties and the use of seismic amplitude information in prospect risking. Practical exercises utilise Excel based applets to aid understanding and the lessons learnt are of general application.						
D469a	The Practice of Seismic Depth Imaging	Foundation	Distance Learning	David Kessler	6 Sessions	06 - 15 Apr	Virtual
	Many petroleum companies routinely utilize pre-stack depth imaging technology in seismic processing workflows for both conventional and unconventional plays. Participants will become familiar with the underlying theory and current industry practices in the application of pre-stack depth imaging technology in conventional and unconventional plays through the use of case studies located in both onshore and offshore environments. Depth imaging provides superior results compared to time processing including accurate time-to-depth conversions for well planning, reliable velocity models for pore pressure prediction, and superior geohazard identification.						
D049a	Seismic Attributes for Exploration and Reservoir Characterisation	Skilled	Distance Learning	John Castagna	10 Sessions	19 - 30 Apr	Virtual
	Through lectures and pc-based exercises, students will gain the skills required to select and apply a broad range of seismic attributes including combined attributes in exploration and reservoir characterization projects. Lecture and exercise materials cover interpretation workflows using attributes currently available on most modern workstations as well as recently developed seismic applications designed to extract the smaller scale geologic details required for the construction of reservoir models						
D485a	Advanced Seismic Interpretation	Skilled	Distance Learning	Rachel Newrick	8 Sessions	07 - 17 Jun	Virtual
	This course is designed to strengthen key interpretation skills and add tools to the interpreter's workflow. The strengthening of these skills and added tools will enable participants to improve success rates and decrease drilling risks and costs by reducing structural, stratigraphic and fluid uncertainty.						
D483a	Geological Seismic Interpretation of Deepwater Systems: Depositional Environments, Reservoir Architecture and Stratigraphy	Skilled	Distance Learning	Mike Mayall	6 Sessions	08 - 17 Jun	Virtual
	This course focuses on the seismic stratigraphic interpretation of deepwater depositional systems and has an emphasis on utilising practical workflows for mapping, predicting and quantifying deepwater reservoirs. Through this, the course provides seismic interpreters with the skills and techniques required to more efficiently map different deepwater facies leading to better understanding of the reservoir distribution and stratigraphic trap potential. This can be utilised in all stages of the E&P cycle.						
D385a	Workflows for Seismic Reservoir Characterisation	Skilled	Distance Learning	Patrick Connolly	10 Sessions	14 - 25 Jun	Virtual
	This course provides participants with the skills to design and execute workflows to achieve optimal seismic reservoir characterisation results. The course addresses seismic conditioning to enhance the data and seismic inversion to make quantitive estimates of reservoir properties. Coloured inversion and a comprehensive review of AVO methods including extended elastic impedance are also covered. Furthermore, the course provides a review of seismic inversion methods, including both conventional deterministic methods and the latest Bayesian probabilistic approaches. Application of this course will empower participants to better delineate reservoir and pay distribution, which is of particular use during reservoir appraisal, development and production.						
D470a	AVO Reflectivity, Pre-stack Inversion and Quantitative Seismic Interpretation	Skilled	Distance Learning	Bill Goodway	6 Sessions	22 Jun 01 - Jul	Virtual
	Utilization of AVO (Amplitude Versus Offset) reflectivity-based pre-stack elastic and anisotropic seismic inversion methods has increased in the last decade, thereby providing geoscientists and engineers with direct subsurface investigation methods to characterize reservoirs and plan drilling projects. During the same period, improvements in seismic reflection imaging and QI (quantitative interpretation) analysis have enabled more reliable predictions of reservoir lithology, porosity, and fluids while also yielding useful insights regarding fluid flow and hydro-fracture stimulation through detailed 3D mapping of reservoir inhomogeneities, stresses, and fractures. This course provides geoscientists and engineers with the practical skills necessary to utilize seismic inversion methods and QI techniques to characterize reservoirs and plan drilling projects for both conventional and unconventional reservoirs.						

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
D085a	Introduction to Seismic Interpretation	Foundation	Distance Learning	Rachel Newrick	10 Sessions	18 - 29 Oct	Virtual
	For petrotechnical professionals and support staff seeking to gain a practical knowledge and a working understanding of the techniques and concepts used in the seismic interpretation process, this course provides a through introduction covering all aspects of seismic data, from the fundamentals of the seismic method to mapping and the use of seismic attributes. It has proven beneficial for petro-engineers that need a better understanding of the products they use from seismic interpreters. This longstanding foundational seismic course has added value for new hires, those switching to a seismic-based role, for geo-techs and petroleum engineers.						
D468a	Deep Water Reservoirs – Exploration Risking and Development Characterisation	Foundation	Distance Learning	Vitor Arbeu	10 Sessions	18 - 29 Oct	Virtual
	The course emphasizes key changes in deep water reservoir models that have a major impact on exploration and production of these reservoirs. Participants will learn how to interpret and map environments of deposition (EoD's) in deep water systems, and understand how the different EoD's and sub-EoD's behave as reservoirs. Engineering data will also be used to demonstrate how to improve prediction of reservoir performance.						
D066a	An Objective Approach to Seismic Processing	Foundation	Distance Learning	Rob Hardy	6 Sessions	02 - 10 Nov	Virtual
	This course covers fundamental issues and linkages involved in acquiring and processing seismic data. The course focuses on the questions that seismic interpreters need to address to determine whether, and how, to re-acquire or re-process existing seismic data. Throughout the class, participants will use case histories and interactive processing tools to improve their understanding of the latest techniques and how to apply them effectively and efficiently to meet their objectives.						
D527a	Interpretation of Complex Structures: Techniques for Unraveling Structural Geometry and History	Skilled	Distance Learning	Gloria Eisenstadt	6 Sessions	09 - 11 Mar	Virtual
	This is a hands-on workshop that is focused on interpretation techniques for complex 2D and 3D seismic data. Many exploration areas have undergone multiple periods and directions of deformation and often misinterpreted. 2D seismic data in complex areas present very different problems for the interpreter. 2D seismic data sets are less time consuming to interpret but usually there are not enough data to constrain the interpretation. Complexly deformed 3D datasets can present a different challenge, as the frequency and complexity of the faulting can be overwhelming. In both cases, experience in unraveling, multiple deformations, evaluating confusing map patterns, evaluating results from auto-fault picking and machine learning, and knowing best practice use of seismic attributes for structural interpretation are essential.						
D527b	Interpretation of Complex Structures: Techniques for Unraveling Structural Geometry and History	Skilled	Distance Learning	Gloria Eisenstadt	6 Sessions	07 - 16 Dec	Virtual
	This is a hands-on workshop that is focused on interpretation techniques for complex 2D and 3D seismic data. Many exploration areas have undergone multiple periods and directions of deformation and often misinterpreted. 2D seismic data in complex areas present very different problems for the interpreter. 2D seismic data sets are less time consuming to interpret but usually there are not enough data to constrain the interpretation. Complexly deformed 3D datasets can present a different challenge, as the frequency and complexity of the faulting can be overwhelming. In both cases, experience in unraveling, multiple deformations, evaluating confusing map patterns, evaluating results from auto-fault picking and machine learning, and knowing best practice use of seismic attributes for structural interpretation are essential.						

STRUCTURE AND TECTONICS

N053a	Compressional Structural Styles: Models for Exploration and Production	Skilled	Field	Paul MacKay, Malcolm Lamb	5 days	20 - 24 Jul	Alberta, Canada
	The course is a combined lecture and field-based investigation of thrust and fold structures in compressional belts, examining the changes in structural geometries in different lithologies, at different burial depths and along strike. Comparisons with subsurface examples and seismic models of exposed structures are made throughout the course.						
N379a	Application of Geomechanics to Reservoir Characterization, Management and Hydraulic Stimulation	Skilled	Field	Peter Hennings, Jon Olson	5 days	02 - 06 Aug	Wyoming, USA
	The goal of this field workshop is to provide geoscientists and engineers with a thorough and practical exposure to the range of topics required to understand, characterize and predict the geomechanical response of reservoir rocks to geologic processes, field management, and hydraulic fracturing. The deep integration of geological mechanics and reservoir engineering is a primary goal of the course and is woven throughout via integrated and interactive class projects worked by interdisciplinary teams.						

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
D149a	Practical Salt Tectonics	Skilled	Distance Learning	Mark Rowan	8 Sessions	02 - 12 Aug	Virtual
	This class provides a comprehensive overview of all aspects of global salt tectonics, covering content ranging from the depositional and tectonic settings of salt basins, mechanics, diapirism, structural styles of salt deformation, salt-sediment interaction and the impact of salt on the petroleum systems. Geoscientists completing this class will help their companies: identify, evaluate and risk salt-related prospects; build more accurate velocity models in areas of tough seismic imaging; and assess the results of appraisal wells and plan development scenarios. The virtual course comprises lectures and exercises involving interpretation of seismic data from basins around the world.						
D521a	Recognizing, Characterizing, & Modeling Naturally Fractured Reservoirs	Foundation	Distance Learning	Wayne Narr	6 Sessions	05 - 14 Oct	Virtual
	Fractures can dominate the flow behavior of a reservoir. Characterization of a reservoir with significant fracture flow, and prediction of reservoir performance, require approaches that differ distinctly from the characterization processes we typically use with conventional reservoirs. In this course we gain knowledge of Naturally Fractured Reservoirs (NFRs) through review of case studies, review and discussion of outcrop analogs, overview of fracture flow effects in well-test data, assessment of data from image logs and core, prediction of fracture occurrence, and overview of modeling methodologies.						
D477a	A Systematic Approach to Defining and Evaluating Stratigraphic and Subtle Combination Traps	Skilled	Distance Learning	Mark Thompson, Mike Mayall, Stuart Archer	8 Sessions	12 - 21 Oct	Virtual
	Many stratigraphic and combination traps are discovered serendipitously, throughout a basin's exploration history. They are often perceived as high risk and volumes are commonly underestimated, especially where the column height is larger than the structural spill. In this course we will develop a consistent and systematic workflow for the deliberate identification and evaluation of such traps. This is important as these subtle traps often get risked in an inconsistent manner across organisations but they can contain significant resources.						
N134a	Carbonate and Shale Faulting and Fracturing Field Seminar	Skilled	Field	David Ferrill, Adam Cawood	5 days	18 - 22 Oct	Texas, USA
	This field seminar explores faulting and fracturing processes in Cretaceous carbonate and shale strata in central and west Texas, with a particular emphasis on excellent exposures of the Eagle Ford and equivalent Boquillas Formations. It examines factors that influence the style and intensity of faulting, folding and fracture development from map to fault block scale and the relationship between fracture spacing and mechanical layering.						
D411a	Mechanical Stratigraphy, Stress and Geomechanics	Skilled	Distance Learning	Kevin Smart, Alan Morris	5 Sessions	15 - 19 Nov	Virtual
	This course will apprise course participants of key concepts in fracture characterization and analysis, stress, and geomechanics. We will explore the importance and application of stress and geomechanical analyses to energy exploration and production in both conventional and unconventional reservoirs, with emphasis on well design, borehole stability, and hydraulic fracturing. Participants will develop the skill sets necessary for planning and evaluating a fracture and geomechanics study.						

BASIN ANALYSIS

D013a	Overpressure in Petroleum Systems and Geopressure Prediction	Foundation	Distance Learning	Jakob Heller, Niven Shumaker	8 Sessions	12 - 22 Jul	Virtual
	This course addresses the origin and distribution of overpressure in the subsurface with emphasis on practical applications to the geoscientist and petroleum engineer. Geoscientists and engineers will learn how to measure, estimate and model pore pressure as an aid to production sweet spot identification, predrill well planning, evaluation of seal breach risk, recognition of lateral drainage and hydrodynamics, and assessing the uncertainty of the pre- drill pressure interpretation. The course includes geopressure analysis in unconventional systems and expanded content on the use of seismic data in pressure prediction.						
N550a	North Sea Overview Field Course (East Coast UK)	Foundation	Field	David Macdonald, Stuart Archer	5 days	20 - 24 Sep	East Coast UK
	The North Sea still presents many opportunities for legacy major companies, smaller operators and new entrants alike. In this field course we 'bring North Sea Plays to life' through the integration of outcrop with seismic, well, and core data. Outcrops span the Devonian to the Late Cretaceous to provide a holistic overview of how the basin has evolved. The trip is organised and ordered through the lens of reservoir geology, with other petroleum systems elements also discussed and evaluated.						
D343a	Depositional Evolution of the GOM Sedimentary Basin	Skilled	Distance Learning	John Snedden	5 Sessions	15 - 19 Nov	Virtual
	This course explores the stratigraphic and structural history of the Gulf of Mexico, from foundational tectonic influences through the evolution from rift to divergent margin. Examination of the interplay of sandstones and carbonates, the progressive change from Jurassic eolian systems to Pleistocene abyssal plain fans, and overprint of multiple tectonostratigraphic events allows for key insights regarding reservoir deposition. Coverage will include the eastern Gulf of Mexico as well as onshore unconventional resource plays.						

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
D522a	Charge Access - The Final Frontier in Petroleum Geoscience	Mastery	Distance Learning	Leon Dzou, Mark Thompson	5 Sessions	15 - 19 Nov	Virtual
	Charge access considers the journey of expelled hydrocarbon from the source rock into the reservoir of a prospect. It is often a critical, if not the critical, risk to the success of any exploration prospect. Often the seismic interpreter hands over their maps to the petroleum systems analyst to consider charge risk and fetch volumes with no collaboration or integration. The integration of the geological concept and structural framework with petroleum systems modelling is the focus of this course. The course presents a rich series of global examples and case histories, taught by two industry experts with over 80 years of experience between them.						
W011a	North Sea Reservoirs Series - New Perspectives on North Sea Plays	Skilled	Distance Learning	Dave Quirk, Stuart Archer	4 Sessions	23 - 24 Nov	Virtual
	This play based overview spans the entire spectrum of North Sea plays. Fundamental knowledge regarding the stratigraphic and structural setting of each play will be transferred using standard subsurface datasets (seismic, wireline and core) as well as a new angle using historical statistics (success rates, discovery sizes and area yield). Although the plays are defined through the lens of reservoir geology, other elements of the petroleum system will also be discussed (seal, traps, source, charge and timing).						

STRATIGRAPHY, CLASTICS AND CARBONATES

W030a	Chalk - a Geology and Geophysics Workshop	Skilled	Distance Learning	Andy Gale, TBC	5 Sessions	26 - 30 Apr	Virtual
	This workshop provides deep knowledge on the depositional, remobilisation, and diagenetic history of chalks through the lens of both geology and geophysics. Subsurface and field examples from the North Sea, onshore France and England, and Texas are shown to demonstrate the natural variability that exists in chalk sedimentology and structure.						
D020a	Carbonate Depositional Systems: Reservoir Sedimentology and Diagenesis	Foundation	Distance Learning	Paul Wright	10 Sessions	07 - 18 Jun	Virtual
	This course evaluates key sequence stratigraphic principles and their usage in reservoir applications, based on detailed sedimentological and stratigraphical examination of the deltaic marginal to shallow marine deposits of the Cretaceous Book Cliffs and Coal Cliffs, SE Utah, USA. Attendees will learn to recognise key marginal marine facies and key surfaces, their sequence stratigraphic significance, and reservoir implications.						
N009a	Sedimentology, Stratigraphy and Reservoir Geology of Deepwater Clastic Systems (County Clare, Ireland)	Skilled	Field	Andy Pulham, Peter Haughton	5 days	09 - 13 Jun	County Clare, Ireland
	The focus of this course is an outcrop examination of basin floor, slope and shelf margin architecture and stratigraphy. Controls on deepwater sedimentation are discussed in detail, specifically high amplitude sea level changes, sediment supply and the importance of varied gravity flow processes to reservoir elements and their distribution. Observations and interpretations are supported by lectures, case studies, analogues and recently-acquired behind outcrop core and wireline log data.						
D517a	Well Log Sequence Stratigraphy for Exploration and Production	Skilled	Distance Learning	Vitor Abreu	4 Sessions	21 -24 Jun	Virtual
	Sequence Stratigraphy is a method developed to support geoscientists in the geologic interpretation of subsurface data, with the objective of predicting play elements presence and quality before drilling. The method can be applied to cores and well logs in all depositional environments. The course will review the basic terminology of surfaces, systems tracts, sequence sets and stratigraphic hierarchy, and their definitions. The method will be described and applied for use to interpret subsurface data in non-marine, shallow marine and deep marine depositional settings. The emphasis will be in the recognition and mapping of play elements from exploration to production scales.						
N011a	High Resolution Sequence Stratigraphy: Reservoir Applications (Utah, USA)	Skilled	Field	Andy Pulham, Lee Krystinik	5 days	22 - 26 Aug	Utah, USA
	This course evaluates key sequence stratigraphic principles and their usage in reservoir applications, based on detailed sedimentological and stratigraphical examination of the deltaic marginal to shallow marine deposits of the Cretaceous Book Cliffs and Coal Cliffs, SE Utah, USA. Attendees will learn to recognise key marginal marine facies and key surfaces, their sequence stratigraphic significance, and reservoir implications.						
N310a	Carbonate Reservoir Characterisation and Modelling	Skilled	Field	Mark Bentley, Ed Stephens	5 days	06 - 10 Sep	Provence, France
	Using analogue outcrops in the Luberon and Cassis area of Southern France, this course develops workflows for static and dynamic modelling in carbonate reservoirs, covering in particular the issues of conceptual reservoir characterisation, the handling of scale and the representation of fracture detail in cellular models. The analogue section chosen is a direct analogue for Shuaiba/Kharaib Middle East reservoirs, including high and low energy areas of rudist platforms, inner and outer shelves and chalks. The modelling principles are transferable to other carbonate environments.						

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
D073a	Integration of Sedimentology, Petrophysics and Seismic Interpretation for Exploration and Production of Carbonate Systems	Skilled	Distance Learning	Gregor Eberli	8 Sessions	07 - 16 Sep	Virtual
	This course provides a comprehensive overview of necessary concepts for seismic interpretation in carbonate systems for successful exploration and production. Newest concepts in depositional and microbial processes in shallow and deep water carbonate environments, rock physics, and sequence stratigraphy are presented though a combination of lectures, case studies and exercises. The participants will be exposed to many aspects of seismic stratigraphic interpretation related to carbonate reservoirs in traditional, unconventional and lacustrine environments.						
D518a	Seismic Sequence Stratigraphy for Exploration and Production	Skilled	Distance Learning	Vitor Abreu	4 Sessions	13 - 16 Sep	Virtual
	Sequence Stratigraphy is a method developed to support geoscientists in the geologic interpretation of subsurface data, with the objective of predicting play elements presence and quality before drilling. The method can be applied to 2D and 3D, seismic lines in all depositional environments. The course will review the basic terminology of surfaces, systems tracts, sequence sets and stratigraphic hierarchy, and their definitions. The method will be described and applied to datasets to later be used to interpret subsurface data in non-marine, shallow marine and deep marine depositional settings. The emphasis will be in the recognition and mapping of play elements from exploration to production scales.						
D523a	Sandstone Diagenesis and Reservoir Quality	Skilled	Distance Learning	Richard Worden	5 Sessions	13 - 17 Sep	Virtual
	The course will examine fundamentals but will extensively use case studies and worked examples. At the conclusion of the course you should feel confident about commissioning reservoir quality studies and interpreting reservoir quality-related data. You will also have an improved understanding of the relationship between reservoir quality and other sub-surface disciplines.						
N096a	Recent Depositional and Stratigraphic Analogues for Fluvial and Shallow Marine Reservoirs	Foundation	Field	Jerry Sexton	5 days	17 - 21 Sep	South Carolina, USA
	Participants will examine and sample modern alluvial, deltaic, estuarine, barrier island, and tidal channel facies to understand the growth, geometry and heterogeneity of reservoir sandbodies. Geomorphology and stratigraphy are linked through the use of trenches, cores and log data to provide insights into threedimensional subsurface interpretations.						
N499a	Shallow Marine Reservoir Analogues and their Application to the Jurassic of the North Sea	Skilled	Field	Stuart Archer, Ronald Steel	5 days	27 Sep 01 Oct	Isle of Skye, Scotland
	The objective of this field course is to examine the Jurassic shallow marine reservoirs of the Hebridean Basins. Discussions will highlight the linkage between active tectonics and depositional processes and will emphasise the importance of a sequence stratigraphic perspective in order to correlate. Outcrop information is integrated with well data across a range of scales to demonstrate the subsurface workflows required to populate interwell areas of reservoir models. Reservoir architecture and heterogeneity will be addressed in the context of fluid flow, development planning and reservoir management and surveillance.						
N526a	Sequence Stratigraphic Controls on Deep-Water Reservoirs Architecture: Brushy Canyon Formation, Permian Basin	Skilled	Field	Vitor Abreu	5 days	04 - 08 Oct	West Texas
	This field course is designed for geoscientists and engineers exploring for and producing deep-water (DW) reservoirs globally, and particularly in the Permian Basin. At the end of this course, participants should have improved abilities to recognize deep-water depositional facies and reservoir architecture, as well as how to use sequence stratigraphy to identify and map key surfaces for DW exploration. The Guadalupe and Delaware mountains in west Texas and New Mexico show unique, world-class exposures of shelfal to slope and basinal settings with seismic-scale, continuous exposures. These exceptional outcrops are ideal to learn about depositional systems, lateral and vertical variations in facies and sequence stratigraphic architecture and surfaces. Coeval shelfal to deep-water environments are exposed both downdip and along strike, with clear stratigraphic relationships from a carbonate shelf margin incised by canyons, feeding confined to weakly confined channel systems, connected to distributive lobe complexes and distal fan fringe sandstones that thin and pinch out onto a basin margin far removed from siliciclastic sediment sources.						
D468a	Deep Water Reservoirs – Exploration Risking and Development Characterisation	Foundation	Distance Learning	Vitor Arbeu	10 Sessions	18 - 29 Oct	Virtual
	The course emphasizes key changes in deep water reservoir models that have a major impact on exploration and production of these reservoirs. Participants will learn how to interpret and map environments of deposition (EoD's) in deep water systems, and understand how the different EoD's and sub-EoD's behave as reservoirs. Engineering data will also be used to demonstrate how to improve prediction of reservoir performance.						
N514a	Clastic Reservoirs from Source to Sink: Low-Accommodation versus High-Accommodation Basin Settings	Skilled	Field	Stuart Archer, Ron Steel	5 days	25 - 29 Oct	Wyoming, USA

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
	This field school allows participants to observe shelfal deposits that were laid down in the Cretaceous Interior Seaway of North America. Wave, tide and fluvially dominated delta types will all be contrasted in an attempt to understand a wide spectrum of marine depositional processes including the development of hyper-pycnites. When the Cretaceous Interior Seaway became broken by Laramide tectonics, the deepwater Washakie Basin developed in Southern Wyoming, and we can examine shelf-edge deltas as deepwater delivery systems. Further, slope channels can be observed in the field and afternoon exercises will be undertaken that allow the age equivalent basin floor turbidites to be mapped in detail. Lectures on shelf edge deltaics and hyper-pycnites will augment the field work. This course is designed as a refresher on sequence stratigraphic principles and attendees will learn to describe and interpret marginal marine facies, key stratal surfaces, and their sequence stratigraphic significance.						
N292a	Deepwater Depositional System Stratigraphy for Exploration and Development	Skilled	Field	Lesli Wood, Mac McGilvery	5 days	01 - 05 Nov	Arkansas, USA
	This course stresses applications to both exploration and development, examining deposits at all scales (seismic to thin section) and presents 3D geological models of these outcrop that show analog flow character during reservoir performance simulation. Participants will gain an understanding of potential reservoir body geometry and its impact on the degree of stratigraphic compartmentalization and internal reservoir flow units.						
N442a	Reservoir Architecture of Deep Water Systems	Skilled	Field	Vitor Abreu	5 Sessions	02 - 06 Nov	California, USA
	Submarine canyons and deep water channels are the primary conduits for the transfer of coarse sediments from the shelf to deep water fans and are major exploration targets. The evolution of southern California included many episodes of deep water sedimentation in settings ranging from a Paleozoic cratonic passive margin to Mesozoic forearc and arc settings to Cenozoic transform, pull-apart, and continental borderland basins. This course will examine six deep water systems in which large and small submarine channels and fans played major roles as sediment transport routes and sites of sedimentation.						
W023	North Sea Reservoirs Series - Tertiary Reservoirs: A Source to Sink Overview including Deposition and Injection	Skilled	Distance Learning	Peter Haughton, Stuart Archer	2 Sessions	30 Nov	Virtual
	No Information.						

PETROPHYSICS

D003a	Geological Interpretation of Well Logs	Foundation	Distance Learning	Jenny Garnham, Martin Kennedy	10 Sessions	08 - 18 Mar	Virtual
	This course is an introduction to the principles and applications of conventional well logs. It shows how combinations of logs can be used to interpret mineralogy, lithology, facies, depositional environments and key sequence stratigraphic markers such as flooding surfaces. Sessions start by considering the individual measurements but as the course progresses there is an increasing emphasis on combinations of measurements and the trends with depth. The climax of the course is an exercise to produce a robust correlation scheme using data from three wells. The correlation scheme is then used to choose the location for a fourth well designed to intersect the best developed reservoir.						
D083	Petrophysics and Formation Evaluation: Principles and Practice	Foundation	Distance Learning	Mike Lovell, David Eickhoff	6 Sessions	14 - 22 Apr	Virtual
	The course examines the fundamental concepts, vocabulary, and techniques used in petrophysics, exploring the physical properties of rock formations and their pore fluids, and demonstrating how these properties are estimated both in the laboratory and the wellbore. It focuses on the key petrophysical ideas that underpin petrophysical analysis and how downhole logs and core measurements enable quantitative estimates of hydrocarbons in place.						
D525a	Petrophysics Uncovered: a Helpful Guide to Understanding Petrophysics	Awareness	Distance Learning	Mike Lovell	2 Sessions	11 - 12 May	Virtual
	This brief course is intended for the non-specialist. The aim is to explore at an introductory level the role of petrophysics in subsurface exploration and development and to gain an awareness of the importance of petrophysics in subsurface workflows. The focus is on the terminology and vocabulary used by petrophysicists and the course provides a simple overview of how petrophysical properties are determined.						
D187a	Low Resistivity Low Contrast Pay	Skilled	Distance Learning	John Kulha, David Eickhoff	6 Sessions	14 - 23 Sep	Virtual
	This course will provide a proven methodology to identify and evaluate Low Resistivity Low Contrast (LRLC) pays as seen in modern wells or as depositional bypassed pays in old wells. Worldwide examples from productive LRLC reservoirs will be discussed. The guest lecture, filling the morning of Day 3, will cover the applicability of some of the latest logging tools.						

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
D054a	Skilled Petrophysical Methods for Conventional Reservoirs	Skilled	Distance Learning	David Eickhoff	6 Sessions	08 - 17 Nov	Virtual
	This intermediate level petrophysics course explains the physical properties of rocks and their constituent fluids, how their properties are measured and how this information is used in reserve estimation and reservoir characterization of conventional reservoirs. Particular emphasis is given to the interactions between rock and fluid volumes which are explained and then illustrated with real examples. The course explores some of the newer generation tools and methods used in formation evaluation. The class consists of both lectures and exercises which are demonstrated with petrophysical software.						

RESERVOIR DEVELOPMENT

W019a	North Sea Reservoirs Series - Jurassic Reservoirs Overview	Skilled	Distance Learning	John Cater, Stuart Archer	2 Sessions	26 May	Virtual
	The Jurassic of the North Sea hosts the most volumetrically prolific reservoirs of any geological period. This is in part due to the close proximity of a world class source rock but also the range of reservoir seal pairs and has resulted in Jurassic plays still being explored for long after other plays have been designated as mature. Fundamental knowledge regarding the Jurassic depositional environments of each play will be shared by integrating core, well and seismic data with modern analogues and classic outcrops. Although the workshops are organised through the lens of reservoir geology, other petroleum systems elements will be discussed.						
D524a	The Application of Reservoir Geology through the Exploration and Production Life Cycle	Foundation	Distance Learning	Richard Steele	5 Sessions	07 - 11 Jun	Virtual
	In prospect evaluation the priorities are reservoir presence and effectiveness, as well as the consideration of potential recovery factor. Through appraisal and into field development attention remains focussed on recovery factor, with emphasis on pool definition, reservoir continuity, segmentation, and heterogeneity. The production phase is all about optimisation and forecasting, in which reservoir models are powerful. Reservoir models will be built during this course.						
D427a	Reservoir Model Design	Skilled	Distance Learning	Mark Bentley	5 Sessions	28 Jun - 02 Jul	Virtual
	This course examines the standard reservoir engineering processes and techniques, particularly their interface with geoscience activities. This course illustrates, with examples, the use of subsurface data in the construction of a reservoir model. It covers three related main themes: static reservoir models; developing dynamic reservoir simulation models; and reservoir management during the producing life of a field. This course covers the fundamentals of fluid flow in porous media, from a rock and fluid perspective.						
D342a	Compartmentalization and Connectivity in Sandstone Reservoirs	Skilled	Distance Learning	John Snedden	10 Sessions	20 Sep - 01 Oct	Virtual
	The complex interplay of fluids and rock architecture controls efficient depletion of conventional sandstone reservoirs. Stratigraphic and structural analyses often provide much detail, but static and dynamic connectivity information reveal the elements that really matter to flow. This course uses fluid, pressure, log, seismic, and core data to examine the movement of reservoir fluids (oil, gas, water) over geologic and production timescales and determine which factors are critical in the development and exploitation of siliciclastic hydrocarbon reservoirs.						
N012a	Reservoir Modelling Field Class	Skilled	Field	Richard Steele, Karl Stephen	5 days	20 - 24 Sep	Utah, USA
	This course examines the workflow from geocellular modelling to flow simulation, seeking to treat reservoir modelling as a single, shared subject. We educate geoscientists in reservoir engineering and petroleum engineers in reservoir geology in the context of the shared methods and objectives of reservoir modelling						
N033a	Characterisation, Modelling, Simulation and Development Planning in Deepwater Clastic Reservoir	Skilled	Field	Mark Bentley, Ed Stephens	5 days	11 - 15 Oct	Tabernas, Spain
	The objective of this workshop is to explore the reservoir modelling and petroleum engineering aspects of deepwater clastic reservoirs. The discussion highlights the linkage from depositional processes to geological architecture and flow heterogeneity in development planning. This course will be impactful for participants working deepwater developments and producing assets and has a focus on the interconnection between reservoir geoscience and engineering disciplines.						
D412a	A Critical Guide to Reservoir Appraisal and Development	Skilled	Distance Learning	Stephanie Kape, Pete Smith	10 Sessions	01 - 12 Nov	Virtual
	The course is designed to address the decision-based technical workflow that is a pre-requisite to appraisal and development investments. Participants will learn the background theory behind all aspects of reservoirs, from the micro- to seismic-scale, integrating the static and dynamic domains and how to model them. The course covers a range of disciplines, using an integrated subsurface approach with reference to a robust business and commercial framework.						

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
D444a	Development Planning For Mature Fields	Skilled	Distance Learning	Mark Cook, Mark Bentley	5 Sessions	15 - 19 Nov	Virtual
	This multidisciplinary course is designed to give participants a broad appreciation of the evaluation and planning activities associated with incremental development planning. This course takes groups through a wide range of associated issues, fills any knowledge gaps in the essential technical fundamentals required for mature field development planning and uses a case-based exercise which will run through the whole course.						
N305a	Core Facies Analysis for Resource Plays	Foundation	Classroom	Gus Gustason	5 Days	TBC	USGS Core Research Center, Lakewood, CO
	The course is designed to address the decision-based technical workflow that is a pre-requisite to appraisal and development investments. Participants will learn the background theory behind all aspects of reservoirs, from the micro- to seismic-scale, integrating the static and dynamic domains and how to model them. The course covers a range of disciplines, using an integrated subsurface approach with reference to a robust business and commercial framework.						
D401a	Multi-Disciplinary Skills for Field Development Planning and Approval	Skilled	Distance Learning	Pete Smith	8 Sessions	06 - 16 Dec	Virtual
	This course considers in detail the technical and commercial influences on Field Development Planning within the global oil and gas industry. It considers the need for understanding field developments by, resource size, facility choice, development risk, cost and value. This course is tailored to those wishing to deepen their understanding of the multi-discipline skills required for Field Development Planning.						

UNCONVENTIONAL RESOURCES

D313a	Evaluating Shale and Tight Oil and Gas Reservoirs	Foundation	Distance Learning	Creties Jenkins	8 Sessions	22 - 25 Mar	Virtual
	This class provides an introduction to the exploration, appraisal, and development of oil and gas resource plays. It identifies the data that need to be collected, how to analyze and interpret them, and how to integrate and apply this knowledge to the decision-making process. Case studies from a large number of active plays are presented.						
N406a	Unconventional Resource Assessment and Valuation	Skilled	Classroom	Creties Jenkins, Mark McLane	4 Days	19 - 22 Apr	Midland, USA
	This course provides the strategies, tactics, and tools needed to effectively assess and value oil and gas resource plays. Probabilistic techniques and a staged approach are applied to make good decisions about which projects to invest in and how to wisely spend limited capital. This is critically important, given the risks and uncertainties inherent in these plays, as well their technical complexities and limited datasets. **This course is run in partnership with Rose and Associates.**						
D471a	The Petroleum System in Unconventional Exploration & Production: Geology, Geochemistry and Basin Modeling	Foundation	Distance Learning	Andy Pepper	8 Sessions	17 -20 May	Virtual
	The course teaches how to use regional geology, geochemistry and petroleum systems modeling in evaluating unconventional/resource play reservoirs. The processes discussed range from deposition of the organic-rich rock; generation, expulsion, migration and accumulation processes leading to saturation of the reservoir; to the prediction of reservoir and produced fluid properties and values. This class will arm geologists and engineers with advanced capabilities to: identify, map and evaluate new plays; identify storage and production sweet spots in plays; identify vertical/by-passed storage and production sweet spots to optimize landing zones in new and existing plays.						
N463a	Geological Drivers for Tight-Oil and Unconventional Plays in the Powder River Basin and Applications to Other Basins	Foundation	Field	Randi Martinsen, Lee Krystinik	5 days	11 - 15 Jun	Wyoming, USA
	Sometimes your engineer can't just "hit it harder and frack past the problem". Geoscientists and their engineering colleagues will examine controls on location, thickness, natural fracturing and ultimate reservoir quality of "tight-oil sandstones" and "source rock" resource plays in the Powder River Basin. Lateral and vertical heterogeneity, synsedimentary and post-burial tectonic deformation are focal points because these factors dramatically impact the choice of completion methodology, development plans and reservoir management at the single well and field scale. Concepts presented apply to unconventional plays along the Rockies, into Canada, the Gulf Coast of Texas and Louisiana, West Texas, Latin America, Europe and Asia.						

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
D479a	Applied Statistical Modeling and Big Data Analytics	Skilled	Distance Learning	Srikanta Mishra	5 Sessions	28 Jun 02 Jul	Virtual
	This training course will provide a hands-on introduction to statistical modeling and big data analytics for petroleum engineering and geoscience applications. Topics to be covered include: (a) easy-to-understand descriptions of the commonly used techniques, (b) case studies demonstrating the applicability, limitations and value-added proposition for these methods, and (c) hands-on problem sessions using open source and/or commercial software. This course will provide engineers and geologists with practical techniques for identifying hidden patterns and relationships in large datasets and extracting data-driven insights towards actionable information that can contribute to lower cost, improved efficiency and/or increased productivity in oil and gas operations. This class will arm petroleum engineers and geoscientists with advanced capabilities to extract new insights from E&P data that can help: (a) learn hidden patterns and relationships in geologic datasets, (b) identify production sweet spots in developed plays, (c) determine factors responsible for separating good wells from poor producers wells, (d) build fast surrogate model of reservoir performance, and (e) assist in predictive maintenance by identifying failure inducing conditions from historical records.						
N364a	Fracture Architecture, Sedimentology and Diagenesis of Organic-rich Mudstones of Ancient Upwelling Zones with Application to Naturally Fractured Reservoirs	Skilled	Field	Richard Behl, Michael Gross	5 days	12 - 16 Jul	California, USA
	This course uses the Monterey Formation as a natural laboratory to understand the origin, distribution and physical properties of biogenic, organic-rich mudrocks as well as the relationship between mechanical stratigraphy and fracture distribution in layered rocks. Participants will learn to distinguish types of siliceous, calcareous/dolomitic, phosphatic and organic-rich rocks and understand relationships between composition, diagenesis, bedding and fracture architecture to enhance prediction of reservoir properties.						
D274a	Unconventional Resource Engineering for Geoscientists	Foundation	Distance Learning	Yucel Akkutlu	6 Sessions	20 - 29 Jul	Virtual
	This course introduces geoscientists to the terminology and practices of the drilling, completion, and reservoir engineers with whom they interact on multi-disciplinary unconventional resource evaluation teams. It also discusses future directions in unconventional resource engineering.						
N241a	Depositional Processes, Fabrics and Stratigraphic Framework of Mudrocks: Applications to Shale Reservoirs	Skilled	Field	Jeff May	5 days	13 - 17 Sep	Colorado and Wyoming, USA
	This course utilizes cores, outcrops and well logs to examine and interpret the heterogeneity of finegrained depositional systems. Participants. These skills will enhance their ability to evaluate the resource potential of shales.						
N406a	Unconventional Resource Assessment and Valuation	Skilled	Classroom	Creties Jenkins, Mark McLane	4 Days	19 - 22 Apr	Midland, USA
	This course provides the strategies, tactics, and tools needed to effectively assess and value oil and gas resource plays. Probabilistic techniques and a staged approach are applied to make good decisions about which projects to invest in and how to wisely spend limited capital. This is critically important, given the risks and uncertainties inherent in these plays, as well their technical complexities and limited datasets. **This course is run in partnership with Rose and Associates.**						
N313a	Evaluating Shale and Tight Oil and Gas Reservoirs	Foundation	Classroom	Creties Jenkins	4 Days	04 - 07 Oct	Midland, USA
	This class provides an introduction to the exploration, appraisal, and development of oil and gas resource plays. It identifies the data that need to be collected, how to analyze and interpret them, and how to integrate and apply this knowledge to the decision-making process. Case studies from a large number of active plays are presented. This knowledge will enable participants to critically assess opportunities, compare them to successful analogs, and invest in those projects whose characteristics are consistent with commercial success. **This course is run in partnership with Rose and Associates.**						
D345a	Next Generation Earth Modeling: Integrating Geostatistics, Geoscience, Engineering, and Data Science	Skilled	Distance Learning	Jeffrey Yarus	6 Sessions	13 - 29 Oct	Virtual
	This class addresses the application and integration of data analytics to subsurface geomodeling for unconventional resources, including oil, gas, and geothermal. Deterministic and stochastic methods used to create static models and uncertainty assessment will be reviewed to establish a common knowledge baseline. This is followed by skill development in data analytical methods such as multivariate statics and machine learning. Topics include kriging, conditional simulation, principal components, cluster analysis, regression, recursive portioning, neural networks, and other practical methods. The class focus is to go beyond traditional static modeling through the integration of geostatistics and data science to produce reliable models for reservoir and completion engineers.						
D437a	Geomechanics for Unconventional and Tight Reservoirs	Skilled	Distance Learning	Neal Nagel, Marisela Sanchez-Nagel	8 Sessions	25 Oct - 04 Nov	Virtual
	The application of geomechanical knowledge has become critical to the successful drilling and completion of unconventional plays. This course presents the basics of oil-field geomechanics (including stress/strain, pore pressure, rock behavior and wellbore applications) and then focuses on the geomechanical characterization and modeling of unconventional reservoirs with the goal of optimizing multistage hydraulic fracturing operations in horizontal wells.						

Class Code	Title	Competency Level	Delivery Mode	Instructor/s	Duration (sessions/ days)	Dates	Location
D250a	Evaluation Methods for Shale Reservoirs	Skilled	Distance Learning	Jeff May, Andy Pepper, John Randolph, Neal Nagel, Rick Lewis	10 Sessions	01 - 12 Nov	Virtual
	The evaluation of shale reservoirs presents a challenge: whereas some of the approaches applied are the same as those used for conventional reservoirs, some new tools and many new methodologies have been developed for this rapidly evolving subject. More than ever, the evaluation requires an integrated, multidisciplinary effort by geoscientists, petrophysicists, and engineers. This course presents current views on the evaluation methodsrequired to assess new plays, identify sweet spots, and select optimal landing zones.						

PRODUCTION AND RESERVOIR ENGINEERING

D006a	An Introduction to Reservoir Engineering for Geoscientists	Foundation	Distance Learning	Mark Cook	8 Sessions	15 - 25 Mar	Virtual
	This course examines the standard reservoir engineering processes and techniques, particularly their interface with geoscience activities. This course illustrates, with examples, the use of subsurface data in the construction of a reservoir model. It covers three related main themes: static reservoir models; developing dynamic reservoir simulation models; and reservoir management during the producing life of a field. This course covers the fundamentals of fluid flow in porous media, from a rock and fluid perspective.						
D940a	Modern Completion and Production Enhancement Techniques	Skilled	Distance Learning	Jonathan Bellarby	10 Sessions	10 - 21 May	Virtual
	The course expands a basic awareness of wells and completions to cover how completions can affect production. Some of the key subject areas that are covered include the completions scope and types, inflow performance, perforating, stimulation and sand controls, vertical and artificial lift, production chemistry, well integration and completion equipment and installation.						
D959a	Hydraulic Fracturing for Conventional, Tight and Shale Reservoirs	Skilled	Distance Learning	Mike Smith	8 Sessions	02 - 12 Aug	Virtual
	This course addresses the multi-disciplinary technical and economic variables involved in the design and implementation of hydraulic fracturing. This flows from a reservoir evaluation of why/how to frac, to geoscience to quantify many design variables, to frac design and post-frac economic evaluation. Fracture mapping and implementation of multi-stage hydraulic fractures in horizontal wells are included.						
D957a	Forecasting Production and Estimating Reserves in Unconventional Reservoirs	Skilled	Distance Learning	John Lee	8 Sessions	16 - 26 Aug	Virtual
	This course provides engineers, geoscientists, and decision makers with the skills and understanding required to forecast production and estimate reserves in unconventional (ultra-low permeability) oil and gas reservoirs. The course will emphasize oil/gas-shale, as well as tight oil and gas formations.						
N508a	Optimizing Development of Unconventional Reservoirs: Well Spacing, Stacking and Sequencing of Wells	Basic	Classroom	Robert Hull, Paul Leonard	3 Days	31 Aug - 02 Sep	Houston, USA
	This multidiscipline course provides engineers and geoscientists with a set of principles and processes that will enable them to plan, evaluate and subsequently optimize the spacing, stacking and sequencing for wells in multi-well pads in unconventional and tight resource plays. This optimization of wells in participant's areas of responsibility will enhance value and reduce costs even when criteria set by management and external constraints by land-owners or regulatory bodies are included. The course will address field development optimization, landing horizontal wells and their sequencing at a high level. Discussions on reservoir engineering, geomechanics, completions and the technologies to evaluate the stimulations are key parts of this course. Besides the basics of field development related to well spacing, the training focuses on specific technologies to better understand the stimulation and its effectiveness. Integrated data sets are used to highlight key understandings of what controls EUR for unconventional wells. A data set working through well landing zone selection will also be utilized.						
D997a	Applied Reservoir Engineering	Skilled	Distance Learning	Jerry Hadwin	10 Sessions	06 - 17 Dec	Virtual
	This course aims to provide the practicing reservoir engineer with a range of analysis techniques and tools relevant to contemporary field development trends. Fundamental concepts will be discussed to ensure a solid foundation for understanding the applicability and limitations of the techniques presented. The learning will be supported and reinforced by examples and exercises throughout the course.						

COMMERCIAL

D014a	Petroleum Economics and Risk Analysis	Foundation	Distance Learning	Mark Cook	10 Sessions	12 - 23 Apr	Virtual

This course details the main financial concepts and economic evaluation techniques and related financial concepts that are used in the oil and gas upstream business to assist decision making on either the investment of capital or the divestment of assets. The course will be focused upon the conversion of hydrocarbon volumes to 'monetary value' and the requirement for consistent means of determining both the absolute and relative attractiveness of investment opportunities, from exploration, through appraisal and new field development to portfolio management decisions.

INDUSTRY FUNDAMENTALS

D316a	Petroleum Geology for Non-Geologists	Awareness	Distant Learning	Randi Martinsen	6 Sessions	28 Sep - 07 Oct	Virtual

This course introduces non-geologists to the vocabulary and methods used by geoscientists to explore for and develop hydrocarbon reservoirs. Topics include an overview of geologic concepts and principles (e.g. geologic time, sedimentary rock classification, rock layering, plate tectonics, rock deformation); depositional systems; subsurface temperature and pressure; formation, migration and trapping of petroleum; exploration and production practices; reservoir characterization; and dealing with risk and uncertainty.

INTERDISCIPLINARY AND PROFESSIONAL SKILLS DEVELOPMENT

D510a	Mitigating Bias, Blindness and Illusions in E&P Decision Making	Foundation	Distant Learning	Creties Jenkins, Marc Bond	4 Sessions	28 Sep - 07 Oct	Virtual

Decisions in E&P ventures are affected by cognitive bias, perceptual blindness, and illusions which permeate our analyses, interpretations and decisions. This course examines the influence of these cognitive errors and presents techniques that can be used to mitigate their impact. The course includes awareness exercises, E&P examples, mitigation tools, and (most importantly) mitigation exercises to practice lessening the impact of these errors.

D510b	Mitigating Bias, Blindness and Illusions in E&P Decision Making	Foundation	Distant Learning	Creties Jenkins, Marc Bond	1 Sessions	11 Oct	Virtual

Decisions in E&P ventures are affected by cognitive bias, perceptual blindness, and illusions which permeate our analyses, interpretations and decisions. This course examines the influence of these cognitive errors and presents techniques that can be used to mitigate their impact. The course includes awareness exercises, E&P examples, mitigation tools, and (most importantly) mitigation exercises to practice lessening the impact of these errors.

CONTACT

RPS | EUR Energy - Training

Goldvale House,
27-41 Church Street West
Woking, Surrey, GU21 6DH, UK
+44 (0)1635 248910

E EurEnergyBookings@rpsgroup.com

RPS | NA Energy - Training

20405 Tomball Parkway, Building 2,
Suite 200 Houston, TX 77070
+1 281 448 6188

E USAEnergyBookings@rpsgroup.com

RPS | CA Energy - Training

555 4th Avenue SW, Suite 600
Calgary, AB T2P 3E7
+1 403 284 1250

E CanEnergyBookings@rpsgroup.com