

2010
SCHEDULE FOR E&P COURSES

Schedule

Typical
Career

Information and
Management

Geosciences

Reservoir
Engineering

Drilling - Completion -
Well Control

Field
Operations

Blended
Learning

Index

1 day ❖ 1,5 days ◆ 2 days ○ 3 days ● 4 days □ 5 days ■ More than 5 days ■■

Unit	Course title	Location	January	February	March	April	May	June	July	August	September	October	November	December
INFORMATION AND MANAGEMENT														
MANAGEMENT														
E-001	IRM Integrated Reservoir Management	Rueil & London				19 ■■	18							
E-004	Short MBA on energy management	Rueil						21 ■■	02					
E-006	International oil summit	Paris				22 ❖								
E-008	International gas & electricity summit	Paris										04 ◆	05	
E-010	Overview of petroleum economics	Rueil										20 □	23	
E-012	Overview of natural gas economics	Rueil						28 □	01					
E-014	Liquefied natural gas economics	Rueil									21 □	24		
E-016	Oil markets and trading	Rueil				07 ●	09							
E-018	CO ₂ : introduction to CSS (Carbon Capture Storage)	Rueil						21 ○	22					
UPSTREAM ECONOMICS														
E-060	Upstream economics and management	Rueil				19 ■■	07							
E-062	Contractual framework of Exploration-Production	Rueil									07 □	10		
E-064	Production sharing and joint operating agreements	Rueil						29 □	02					
E-068	Economic framework of Exploration-Production	Rueil		22 ■	26									
E-070	Economics and risk analysis of upstream projects	Rueil						14 ■	18					
F-072	<i>Prise de décision dans l'amont pétrolier</i>	Rueil									14 ●	16		
E-074	Practice of E&P contracts economic modeling	Rueil						05 □	08					
F-076	<i>Bases de la comptabilité pétrolière : comprendre les états financiers et la consolidation</i>	Rueil			08 ■	12								
F-078	<i>Comptabilité dans l'amont pétrolier</i>	Rueil												06 ■
F-079	<i>Audit dans l'Exploration-Production</i>	Rueil												13 ■
E-085	CO ₂ : technical and economical evaluation of CCS projects	Rueil						23 ○	24					
E&P TECHNICAL INFORMATION AND PLURIDISCIPLINARY COURSES														
E-030	Graduate diploma in petroleum engineering English courses (optional) Technical courses	Pau	06 ■■	12										
E-001	IRM Integrated Reservoir Management	Rueil & London				19 ■■	18							
F-031	<i>Découverte de techniques de l'Exploration-Production</i>	Rueil						01 ●	04			19 ●	22	
E-033	Hunting for oil: Exploration and Production techniques	Rueil						21 ■	25					
E-035	Introduction to petroleum engineering	Rueil						21 ■	25					
E-038	Reservoir management	Rueil				05 ■■	15					20 ■■	01	
E-100	Introduction to petroleum geophysics	Rueil									20 ■	24		
F-200	<i>Introduction à la géologie pétrolière</i>	Lodève						07 ■	11					
E-350	Introduction to reservoir engineering	Rueil										27 ■	01	
E-410	Drilling fundamentals	Rueil									20 ■	24		
E-411	Well completion and servicing	Rueil		15 ■	19									
E-501	Oil & gas field processing	Rueil				19 ■	23			28 ■	02	20 ■	24	
E-690	Project management - Application to Oil & Gas upstream	Rueil												06 ■
E-018	CO ₂ : introduction to CSS (Carbon Capture Storage)	Rueil						21 ○	22					
E-044	CO ₂ - Geological storage: site selection & characterization	Rueil											04 ○	05
E-085	CO ₂ : technical and economical evaluation of CCS projects	Rueil						23 ○	24					
F-046	<i>Pétrole et environnement : protection des aquifères profonds</i>	Rueil									15 ●	17		

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GEOSCIENCES														
GEOPHYSICS														
E-100	Introduction to petroleum geophysics	Rueil									20 ■ 24			
E-101	Signal processing: a tool for acquisition and processing of geophysical data	Rueil		15 ■ 19										
E-110	Borehole seismic	Rueil									27 ■ 01			
E-120	3D land seismic acquisition and design	Massy									13 ■■ 24			
E-125	Improvement of seismic imaging by near surface formation	Rueil + field trip										05 □ 08		
<i>F-130</i>	<i>Traitement sismique</i>	<i>Massy</i>						14 ■■ 25						
E-131	3D seismic interpretation	Rueil					26 ■■ 07							
E-140	Seismic processing (Blended Learning)	at distance	11 ■■ 02								13 ■■ 03			
LOGS														
<i>F-150</i>	<i>Les diagraphies dans les forages pétroliers</i>	<i>Rueil</i>		22 ■ 26										
E-151	Operations geology (well site geology)	Rueil											22 ■ 26	
E-160	Well log interpretation	Rueil					17 ■ 21							
E-170	Advanced well log interpretation	Rueil						14 ■ 18						
E-171	Well log interpretation on computer	Rueil								06 ■■ 17				
E-180	Cased hole well logging and interpretation	Rueil						21 ■ 25				25 ■ 29		
E-190	Well log interpretation (Blended Learning)	at distance	18 ■■ 12								20 ■■ 12			
PETROLEUM BASIN & EXPLORATION														
<i>F-200</i>	<i>Introduction à la géologie pétrolière</i>	<i>Lodève</i>						07 ■ 11						
E-202	Graduate diploma geosciences English courses (optional) Technical courses	Pau								12 ■■ 17	12 ■■ 20	23 ■■ 17		
E-203	Petroleum exploration	Rueil & field trip					12 ■■ 02							
<i>F-204</i>	<i>Fondamentaux et intégration des outils pétroliers</i>	<i>Rueil</i>									13 ■■ 15			
<i>F-205</i>	<i>Évaluation de bassins et définition de prospects</i>	<i>Rueil</i>										18 ■■ 05		
E-206	Sedimentological interpretation of well data	Rueil					25 □ 28							
E-211	Structural analysis and modeling	Rueil						31 ■ 04						
E-212	Sedimentology & sequence stratigraphy	Rueil						07 ■ 11						
E-213	Petroleum organic geochemistry: from kerogen to reservoir	Rueil						14 ■ 18						
E-214	Basin modeling	Rueil						21 ■ 25						
E-216	Play assessment & prospect evaluation	Rueil						28 ■ 02						
E-217	From prospect to development: an integrated approach	Rueil											15 ■■ 26	
E-218	Stratigraphic modeling: basin architecture & sediment distribution	Rueil		01 ■ 05										
E-219	Basin modeling: thermicity, maturation & hydrocarbon distribution	Rueil		08 ■ 12										
RESERVOIR GEOLOGY														
E-250	Reservoir Characterization & Modeling	Rueil & Field trip									13 ■■ 05			
E-260	Reservoir geology	Rueil & Field trip									13 ■■ 08			
E-261	Geological modeling for integrated reservoir studies	Rueil						07 ■ 11						
<i>F-262</i>	<i>"Well test" pour la modélisation de réservoirs</i>	<i>Rueil & Field trip</i>			16 ✦ 20									
E-263	Clastic reservoir: from outcrops to integrated studies	Field trip						21 ■■ 25						
E-264	Carbonate reservoir: from outcrops to integrated studies	Field trip				26 ■ 30								
E-265	Fracturation reservoir: characterization and modeling	Rueil & Field trip									11 ■ 15			
E-266	Petroleum geostatistics	Rueil											15 ■ 19	
E-267	Petrophysical properties: log, core and test data integration	Rueil									18 ■ 22			
E-275	Subsurface mapping	Rueil												29 ■ 03

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GEOSCIENCES (suite)														
RESERVOIR GEOPHYSICS														
E-300	Reservoir geophysics	Rueil												06 ■ 10
E-310	Acoustic and seismic wave propagation in porous media	Rueil												13 ■ 17
E-330	AVO & seismic inversion: tools for reservoir property prediction	Rueil						31 ■ 04						
E-332	Lithoseismic: advanced reservoir characterization from seismic	Rueil										12 ■ 16		
E-335	Micro seismic: new insights on reservoirs	Rueil											08 ● 10	
E-340	Seismic reservoir characterization (Blended Learning)	at distance		22 ■■■ 02								18 ■■■ 26		
RESERVOIR ENGINEERING														
E-350	Introduction to reservoir engineering	Rueil									27 ■ 01			
<i>F-351</i>	<i>Notions de réservoir</i>	<i>Rueil</i>						07 ■■ 18						
E-250	Reservoir characterization & modeling	Rueil & field trip									13 ■■■ 05			
E-030	Graduate diploma in petroleum engineering English courses (optional) Technical courses	Pau	06 ■■■ 18 06 ■■■ 12 15 ■■■ 18											
E-360	Reservoir engineering	Rueil & field trip									13 ■■■ 03			
E-260	- Reservoir geology (Module I)	Rueil & field trip									13 ■■ 08			
E-362	- Fluids studies - PVT (Module II)	Rueil									11 ■ 15			
E-363	- Core analysis for reservoir characterization (Module III)	Rueil									18 ■ 22			
E-365	- Well test analysis (Module IV)	Rueil									25 ■ 29			
E-370	- Drive mechanism - Enhanced oil recovery (Module V)	Rueil											02 ■■ 10	
E-373	- Dynamic reservoir simulation (Module VI)	Rueil											15 ■■ 26	
E-375	- Development project and uncertainties (Module VII)	Rueil											29 ■■ 03	
<i>F-361</i>	<i>Réalisation du puits et interprétation des essais puits</i>	<i>Rueil & field trip</i>			15 ■■ 26									
<i>F-372</i>	<i>Projet de développement et économie</i>	<i>Rueil</i>				19 ■■ 23								
E-383	Fractured reservoirs: dynamic characterization and flow simulation	Rueil					03 ■■ 07							
E-385	PVT modeling	Rueil											22 ■■ 26	
E-386	Enhanced oil recovery (EOR)	Rueil										18 ■■ 22		
E-387	Gas fields: reservoir engineering	Rueil				12 ■■ 16								
E-388	Advanced well test analysis	Rueil				19 ■■ 23								
E-389	Dynamic reservoir simulation: best practices	Rueil										25 ■■ 29		
E-391	Relative permeabilities determination using CYDAR software	Rueil						21 ■■ 25						
E-038	Reservoir management	Rueil				05 ■■ 15						20 ■■ 01		
E-396	Well test analysis (Blended Learning)	at distance		01 ■■■ 09								20 ■■■ 26		
E-397	Well performance (Blended Learning)	at distance	25 ■■■ 13								06 ■■■ 22			
E-398	Material balance and production mechanisms (Blended Learning)	at distance		08 ■■■ 23								11 ■■■ 26		

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DRILLING - COMPLETION - WELL CONTROL														
DRILLING / COMPLETION														
E-410	Drilling fundamentals	Rueil									20 ■■24			
E-411	Well completion and servicing	Rueil		15 ■■19										
E-030	Graduate diploma in petroleum engineering English courses (optional) Technical courses	Pau	06 ■■18 06 ■■12 15 ■■18											
E-412	Drilling and completion engineering	Pau			15 ■■06									
E-413	Drilling engineering module	Pau			15 ■■26 & 19 ■■06									
E-414	Completion engineering module	Pau			15 ■■16 & 07 ■■06									
DRILLING														
E-415	Practical aspects of well planning and costing	Rueil						07 ■■18						
E-410	Drilling fundamentals	Rueil									20 ■■24			
E-419	Common fundamentals for drilling and completion	Pau			15 ■■19									
E-451	Well productivity & reservoir wellbore interface	Pau			22 ■■26									
E-420	Well architecture and equipment	Pau				19 ■■23								
E-421	Bit & drilling string	Pau					10 ■■14							
E-422	Rig & BOP's and well control equipment	Pau					17 ■■21							
E-423	Logging, mud logging, and fishing while drilling	Pau					24 ■■28							
E-424	HSE: Health, Safety, Environment	Pau						21 ●23						
E-425	Directional and horizontal drilling	Pau						31 ■■04						
E-427	Underbalanced and management pressure drilling: applications, design and operations	Rueil												13 ■■17
E-428	Deepwater drilling and development	Pau							07 ■■11					
FLUIDS														
E-431	Drilling fluids	Pau				26 ■■30								
E-432	Designing a mud program	Rueil										18 ■■22		
E-433	Cementing practices	Pau					03 ■■07							
E-434	Advanced cementing practices	Rueil									20 ■■24			
COMPLETION														
E-411	Well completion and servicing	Rueil		15 ■■19										
E-419	Common fundamentals for drilling and completion	Pau			15 ■■19									
E-451	Well productivity & reservoir wellbore interface	Pau			22 ■■26									
E-453	Well completion equipment (for flowing wells)	Pau				29 ■■02								
E-454	Wellbore treatments	Pau				05 ■■09								
E-455	Matrix acidizing	Rueil						14 ■■18						
E-456	Artificial lift & well intervention	Pau				12 ■■16								
E-458	Artificial lift: gas lift	Rueil						14 ■■18						
E-459	Artificial lift: pumping	Rueil						07 ■■11						
E-460	Nitrogen & coiled tubing operations in completion and workover	Rueil										11 ■■15		
E-461	Well intervention: workover	Pau				14 ●16								
WELL CONTROL														
E-471	Well control (IWCF Certification)	Pau			29 ■■02		03 ■■07	14 ■■18			20 ■■24			
E-473	Well intervention and pressure control (IWCF Certification)	Pau						28 ■■02						

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FIELD OPERATIONS														
OPERATION & PRODUCTION FACILITIES FIELD PROCESSING														
E-501	Oil & gas processing	Rueil				19 ■ 23		28 ■ 02		20 ■ 24				
E-502	Field processing and surface production facilities	Rueil												06 ■■ 17
E-503	Advanced oil & gas field processing	Rueil		15 ■■ 05							20 ■■ 08			
E-504	- Module 1: Thermodynamics applied to well effluent processing	Rueil		15 ■ 19							20 ■ 24			
E-505	- Module 2: Oil and water treatment	Rueil		22 ■ 26							27 ■ 01			
E-506	- Module 3: Gas processing and conditioning	Rueil			01 ■ 05							04 ■ 08		
E-510	Natural gas - Production, treatments, transport, and end uses	Rueil							05 ■ 09					
E-511	Liquified Natural Gas (LNG)	Rueil											29 ■ 03	
<i>F-515</i>	<i>Stockage du gaz naturel</i>	<i>Rueil</i>					25 ○ 26							
<i>F-516</i>	<i>Gaz naturel - Transport par Gazoduc</i>	<i>Rueil</i>					27 ○ 28							
E-520	Simulation of oil and gas field treatment processes - Practice of HYSYS and PROII simulation software	Rueil					17 ■ 21							
E-521	Schematization of oil and gas processes	Rueil				08 ○ 09							08 ○ 09	
E-532	Surface production technician training	Pau & Martigues					17 ■■ 02							
E-533	Surface production superintendent training	Pau & Martigues	11 ■■ 30											
E-534	Production engineer training	Rueil & Martigues	01 ■■ 23								06 ■■ 26			
E-535	Laboratory analysis techniques for Oil & Gas applications	Pau							05 ■ 09					
E-540	FPSO/FSO & Operation of oil terminals	Rueil				26 ■ 30								
PETROLEUM ENGINEERING FOR PRODUCTION ENGINEERS														
E-545	Reservoir Engineering for production engineers	Rueil		01 ■ 05						06 ■ 10				
E-546	Drilling - Artificial Lift & Well interventions for production engineers	Rueil		08 ■ 12							13 ■ 17			
E-030	Graduate diploma in petroleum engineering English courses (optional) Technical courses	Pau	06 ■■ 18 06 ■■ 12 15 ■■ 18											
HEALTH SAFETY & ENVIRONMENT (HSE)														
E-550	Safety and environment in surface processing operations	Rueil Pau Rueil			22 ■ 26				28 ■ 02					02 □ 05
E-560	Safety Engineering - Module 1: Fundamentals of Safety Engineering in design	Rueil											22 ■ 26	
E-561	Safety Engineering - Module 2: Advanced course	Rueil											29 ■ 03	
E-570	HSE considerations & HSE audit for construction/maintenance works	Rueil											02 □ 05	
E-580	Environmental & social impact management: considerations for project and operation phases	Rueil							05 ■ 09					13 ■ 17
E-018	CO ₂ : introduction to CCS (Carbon Capture Storage)	Rueil						21 ○ 22						

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FIELD OPERATIONS (suite)														
EQUIPMENT & MAINTENANCE														
EQUIPMENT FOR SURFACE PRODUCTION														
E-600	Technology of oil & gas processing equipment	Rueil then Martigues			08 ■■ 19							11 ■■ 22		
E-601	- Module 1: Static equipment	Rueil			08 ■ 12							11 ■ 15		
E-602	- Module 2: Rotating machinery	Martigues			15 ■ 19							18 ■ 22		
E-610	Instrumentation & process control - Safety systems	Martigues									06 ■ 10			
E-615	Metering & allocation	Rueil					04 □ 07							
E-617	Electricity and electrical motors	Rueil									15 ● 17			
<i>F-621</i>	<i>Exploitation et entretien courant des pompes centrifuges</i>	<i>Martigues Lyon Lillebonne</i>					03 ■ 07	21 ■ 25				04 ■ 08		
<i>F-625</i>	<i>Exploitation des compresseurs centrifuges</i>	<i>Martigues Lillebonne</i>					31 ■ 04				20 ■ 24			
<i>F-629</i>	<i>Turbines à gaz</i>	<i>Rueil</i>									06 ■ 10			
MAINTENANCE - MAINTENANCE MANAGEMENT - INSPECTION														
E-640	Maintenance superintendent training	Solaize, Martigues, Rueil & Pau									16 ■■■■■			03
E-642	Operation, maintenance and inspection of rotating machinery	Lyon									16 ■■■ 03			
<i>F-643</i>	<i>Diagnostic de l'état des machines par l'analyse des vibrations</i>	<i>Martigues</i>					17 ■ 21							
E-645	Maintenance management - Equipment availability control	Rueil										27 ■ 01		
<i>F-646</i>	<i>Plan d'inspection d'usine</i>	<i>Rueil</i>					18 □ 21							
<i>F-647</i>	<i>Entretien-inspection du matériel chaudronné-soudé</i>	<i>Rueil</i>									13 ■■■ 01			
<i>F-648</i>	<i>Entretien-inspection des soupapes de sûreté et des accessoires de sécurité</i>	<i>Lillebonne Martigues</i>						15 ● 17						07 ● 09
<i>F-649</i>	<i>Inspection des travaux de réparation des équipements statiques métalliques</i>	<i>Lyon</i>						09 ● 11						
ENGINEERING & CONSTRUCTION														
DEVELOPMENT ENGINEERING														
E-650	Offshore field development - Pipelines & flow assurance	Rueil			29 ■ 02							25 ■ 29		
E-655	Pipeline hydraulics and multiphase flow - Practice of OLGA simulation software	Rueil										27 ■ 01		
CONSTRUCTION														
E-670	Construction engineer training	Rueil									20 ■■■■■■■■■			10
E-675	Construction techniques of pressure vessels	Rueil											15 ■ 19	
E-676	Materials for Oil & Gas applications - Calculation standards for pressure vessels	Rueil												20 ■ 24
E-680	Welding of metals	Rueil										18 ■ 22		
E-681	Quality testing techniques of welded equipment	Rueil										25 ■ 29		
E-685	Corrosion and corrosion prevention - Application to Oil & Gas upstream facilities	Rueil										04 ■ 08		
PROJECTS														
E-690	Project management - Application to Oil & Gas upstream activities	Rueil												06 ■ 10
E-695	Cost estimation methods for oil & gas projects - Practice of QUESTOR software	Rueil											29 ■ 03	
E-699	Quality management in projects (QA/QC) - Application to Oil & Gas upstream activities	Rueil												13 ○ 14

SCHEDULE OF E&P TRAINING COURSES PROPOSED FOR 2010

XX

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BLENDED LEARNING														
E-140	Seismic processing (Blended Learning)	at distance	11 ■■■■■ 02								13 ■■■■■ 03			
E-190	Well log interpretation (Blended Learning)	at distance	18 ■■■■■ 12								20 ■■■■■ 12			
E-340	Seismic Reservoir Characterization (Blended Learning)	at distance		22 ■■■■■ 02								18 ■■■■■ 26		
E-396	Well test analysis (Blended Learning)	at distance		01 ■■■■■ 09								20 ■■■■■ 26		
E-397	Well performance (Blended Learning)	at distance	25 ■■■■■ 13									06 ■■■■■ 22		
E-398	Material balance and production mechanisms (Blended Learning)	at distance			08 ■■■■■ 23								11 ■■■■■ 26	