

SYNTECHSYSD



TRAINING FOR CAPACITY BUILDING AND DEVELOPMENT FOR THE NIGER DELTA INDIGENES

TRAINING GUIDE

TRAINING SERIES:

- ☐ INTRODUCTION TO OIL AND GAS
- ☐ SPECIALIZATION IN OIL AND GAS
- ☐ LEAK DETECTION MODELLING

EACH WITH COURSE OUTLINES THAT INCLUDE:

- | | |
|--|--|
| <input type="checkbox"/> Leak Detection modelling | <input type="checkbox"/> Health Safety and Environment |
| <input type="checkbox"/> Civil/ Structural | <input type="checkbox"/> Project Engineering |
| <input type="checkbox"/> Instrumentation and Control | <input type="checkbox"/> Process Engineering |
| <input type="checkbox"/> Electrical Engineering | <input type="checkbox"/> Petroleum Economics |



Letter from the Training Director

Dear Participants,

Training at Syntechsyst/SyntexAcad

We are pleased to host you at our training holding at FOUR Points by Sheraton for young graduates and professionals seeking opportunities in the Oil and Gas Industry.

Syntechsyst together with its subsidiary, First Upstream Project Limited is specialized Technical Company committed to the delivery of Smart Technologies, and sponsoring the project.

SyntexAcad is one way we identify qualified candidates suitable for employment in one of our projects or partners in the delivery of world of solutions to the Oil and Gas Industry.

You shall be trained by some of the best professionals in the industry who have worked with Top Class Engineering Companies in the Oil and Gas Industry. The courses are tailored to meet the needs of both young amateurs and professionals seeking to progress their career in the Oil and Gas industry.

Make it a date with us and you would be glad you did.

Yours Faithfully,

FOR: SYNTECHSYS INTERNATIONAL/FIRST UPSTREAM

DR. DANIEL OKEHI

Executive Chairman

COURSE OUTLINE:

BASIC COURSES



CIVIL/ STRUCTURAL

- Role of the structural engineer on offshore and onshore facilities.
- Introduction to onshore and offshore.
- Writing analysis reports.
- Jacket (facility) integrity assessment.
- Discipline Definition
- Design Project Overview
- Structural project scope
- Project types: brownfield and green field
- Discipline deliverables
- Typical structural engineering activities on projects, design drafting deliverables identification and classification
- Identification of types of structural design deliverable, reference document and software, applicable codes.
- Installation procedure, structural engineering functions in oil and gas

INSTRUMENTATION AND CONTROL

- Definition
 - Well stream controls,
 - Instrumentation Design
- Components, Instrumentation Deliverable and symbol**
- Basic Process control
 - Process Variables
 - Control Systems fundamental
 - Control types and classification.



Controls systems on offshore platform, interpreting control logic,

- Instrumentation Terminologies and definition

ELECTRICAL ENGINEERING

- Electrical systems design.
- Design Procedure
- General one line electrical diagrams for electrical distribution
- Electrical loading, Types of Systems,
- Design Criteria, Introduction to Electrical MTO.
- Required software and Codes.

HEALTH SAFETY AND ENVIRONMENT

- HSE definition and basics.
- Benefits of HSE program.
- Management commitment and Employee involvement.
- Policy and Goals.
- Basic Hazard Identification skills and JSA analysis.
- Ergonomics and RSI prevention
- Hazard prevention and Control systems and methods

PROJECT ENGINEERING

- Career definition and basics.
- Benefits of Project management on oil and gas projects.

- Management commitment and Employee involvement
- introduction to conceptual design, Process and Knowledge Area. □

PROCESS ENGINEERING

- Overview of Industry and role of Process Engineer in various fields.
- Basic design requirement based on the type of plant/project.
- Overview of Basic Design Package.
- Introduction to BFD,PFD,P&ID and PDS of equipments

- Tool and Techniques and their Application.
- Introduction to earned value analysis
- QA/QC and Projects

MECHANICAL ENGINEERING

- Overview of Industry and role of Process Equipment Designer in various fields.
- Basic Design requirement based on the type of plant /Project.
- Overview of PFD,P&ID and Process Data



COURSE OUTLINE:

SPECIAL COURSES

LEAK DETECTION MODELLING

- Modeling of real time detection systems
- Communication system (SCADA)
- Simulation of real time detection systems

PETROLEUM ECONOMICS

- The Role of Petroleum Economics
- Development Economics
- Exploration Economics
- Economics of Incremental Projects



TRAINING PLAN:



TARGET MARKET

NIGER DELTA GRADUATES

**EXPECTED NUMBER
IN ATTENDANCE**

100

COURSES OFFERED

Leak Detection course

Civil/ Structural

Instrumentation and Control

Electrical Engineering

Health Safety and Environmental

Project Engineering

Process Engineering

Mechanical Engineering

Petroleum Economics

FACILITATORS

Dr Kingsley Abhulimen

Dr Agbim

Mr. Oganla

Hommaston Limited

LODGING

YES

Four Points by Sheraton,

Victoria Island Lagos

FEEDING

Coffee/Tea break

Lunch

Dinner only with Accommodation

SOUVENIR	Training Manual Pen, Notepad, USB drive, Shirt , Key holder etc
VENUE	Four Points by Sheraton
SCHEDULE	Wednesday - Friday
LECTURE SCHEME	3 classes holding concurrently undergoing different course training
CERTIFICATE	First Upstream Project Limited Hommaston Limited
PARTICIPANT IDENTIFICATION CARD	YES
STANDARD FEE (Per Person)	₦335, 000 (Three Hundred and Thirty Five Thousand naira)
VIP FEE(Per Person)	₦550, 000(Five Hundred and Fifty Five thousand naira)



TRAINING SCHEDULE

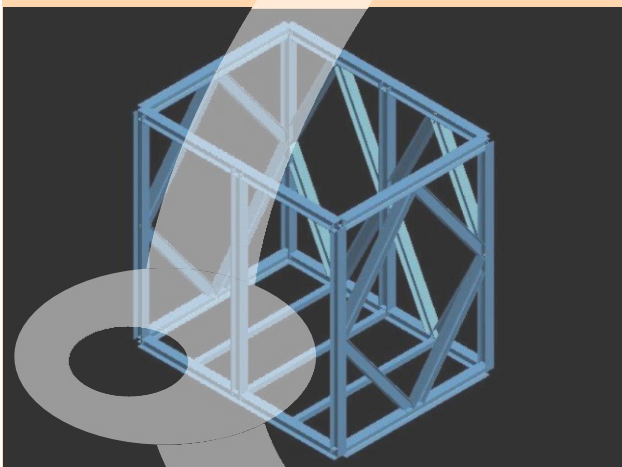
INTRODUCTION TO OIL AND GAS				
Day 1		Process Engineering Overview	HSE Refresher	Engineering Project Management
	7:30-10:30	Class 1	Class 2	Class 3
	10:30-10:45	Coffee/Tea Break		
	10:45-1:45	Class 2	Class 3	Class 1
	1:45-2:30pm	Lunch Break		
	2:30-5:30	Class 3	Class 1	Class 2
	5:30-6:00	Evaluation		
SPECIALIZATION IN OIL AND GAS				
		Civil/Structural Engineering	Instrumentation and Control	Mechanical Engineering
Day 2	7:30-10:30	Class 1	Class 2	Class 3
	10:30-10:45	Coffee/Tea Break		
	10:45-1:45	Class 2	Class 3	Class 1
	1:45-2:30pm	Lunch Break		
	2:30-5:30	Class 3	Class 1	Class 2
		5:30-6:00	Evaluation	
LEAK DETECTION MODELLING				
		Petroleum Economics	Electrical Engineering	Leak Detection
Day 3	7:30-10:30	Class 1	Class 2	Class 3
	10:30-10:45	Coffee/Tea Break		
	10:45-1:45	Class 2	Class 3	Class 1
	1:45-2:30pm	Lunch Break		
	2:30-5:30	Class 3	Class 1	Class 2
		5:30-6:00	Evaluation	

PEOPLE

The tutor group is made up of experienced staff in the oil and gas sector all under the umbrella of First Upstream Project Limited and Hommaston Limited. These people are constant major contributors to capacity building for new entrants as well as specialists in the oil and gas industry.

Above all, the group is made up of industry-leading tutors who have been key players in innovation, research and development of the oil and gas sector across the globe. These professionals will handle the specialized LEAK DETECTION MODELLING course along with Petroleum Economics.

Key course tutors with course taken are listed below.



Deji Oyewole - Project management

Olufunke Taylor - Process Engineering

Nimot Muili - Structural Engineering

Taiwo Soyannwo - Mechanical and Piping

Zayeed Matti - Subsea and Pipeline

Dapo Omolade – Hybrid



LEAK DETECTION MODELLING

FACILITATOR: DR. KINGSLEY ABHULIMEN

ABOUT DR. ABHULIMEN

In 2004, Dr. Kingsley Abhulimen, spurred by a desire to make a difference, in conjunction with his doctoral degree supervisor, Prof. Alfred Susu, submitted an entry for the maiden edition of the LNG Prize Award in their field. They won based on their work - "Real - Time Computer Assisted Leak Detection/Location Reporting and Inventory Loss Monitoring System" - which was described by judges as an outstanding contribution to research in real-time leak detection in network of pipelines, or other flow systems, carrying liquids.



PETROLEUM ECONOMICS

FACILITATOR: DR. ARINZE AGBIM

ABOUT DR. AGBIM

Dr Arinze Agbim is a UCL-trained chemical engineer with in-depth knowledge of the oil and gas industry both within and outside Nigeria.

He retired from Mobil Producing Nigeria (ExxonMobil's Nigerian upstream affiliate) in 1996 as an Executive Director after twenty-five years of service. Between 1996 and 2001 he worked as an energy specialist and consultant for the World Bank in Washington, DC. Since returning to Nigeria in 2001, he has consulted on energy issues for several companies and governmental agencies. He currently teaches petroleum economics on a part-time basis at the University of Lagos.

Dr Agbim strongly believes in education and knowledge acquisition as a means of alleviating poverty and has contributed to several public discussions on the subject.

