



**NABORS DRILLING
INTERNATIONAL LIMITED**

**FIRE & SAFETY
ENGINEERING COLLEGE**
*(a division of International College of
Engineering & Management)*



**Nabors Drilling International Limited (NDIL) In Collaboration With
Fire & Safety Engineering College (FSEC)**

COURSE PRICE SHEET

Dollars 700 per person per day	Including accommodation and meals.
Dollars 550 per person per day	Including meals only.
Dollars 500 per person per day	Excluding accommodation and meals.



**Nabors Drilling International Limited (NDIL) In Collaboration With
Fire & Safety Engineering College (FSEC)**

Top Drive Training for Supervisors

Course aims and target group:

This course is aimed at persons who lead groups of persons at the rig site, and require to have an understanding of the activities that are undertaken with a top drive, and its associated equipment to ensure that its safe operation continues.

Duration: 3 Days.

Course Contents:

- Top Drive History and Basic Function.
- An Overview of the Top Drive Hydraulics Systems.
- Hydraulic Manifold Identifications and Mechanical Requirements.
- Internal Component Identification.
- External Component Identification.
- Troubleshooting.
- Operating Procedures.
- Changing of the Washpipe, Service and Maintenance.
- General Work Activities Carried out on a Canrig Top Drive.
- The Use of Maintenance Checklists.
- Top Drive Inspection and Torque Boost Process.
- The Screening of Faults and the Re-setting of Various Alarms.

The course is a mix of theoretical presentations which are supported by practical sessions ensuring that all skills are explained and that participants can demonstrate competence in the activities.

Assessment Process: Candidates are assessed throughout the training, with a 70% competence level against the theory assessments. Candidates must demonstrate competence in all practical activities. Additional training and assessment is available if candidates require this service.

Certificates: Upon successful completion students will receive the Fire & Safety Engineering College certificates.



**Nabors Drilling International Limited (NDIL) In Collaboration With
Fire & Safety Engineering College (FSEC)**

Pre requisite and Scheduling Criteria:

There are no pre-requisites for this training course.
Training courses are presented at the NDIL Training Centre, located
at the Fire & Safety Engineering College Muscat, Oman. (Location
map is attached).

For Bookings and information contact FSEC
Marketing and Business Development Department.
Tel + 968 24521256, 24512030 Fax: +968 24521042
E-mail: info@fsecoman.com

Price: Dollars 2100 per person including accommodation and meals.

Dates: 20 Sep – 22 Sep 2008 (Saturday – Monday).
25 Oct – 27 Oct 2008 (Saturday – Monday).
22 Nov – 24 Nov 2008 (Saturday – Monday).
6 Dec – 8 Dec 2008 (Saturday – Monday).

Timings: 8 A.M. to 5 P.M.



**Nabors Drilling International Limited (NDIL) In Collaboration With
Fire & Safety Engineering College (FSEC)**

The Operation and Maintenance of a Top Drive

Course aims and target group:

This course is aimed at persons operating with the Rigs Top Drive System, and who have maintenance responsibilities to ensure that the equipment is operational as and when required.

Duration: 5 Days.

Course Contents:

- An Introduction to the Top Drive.
- The Function of the Hydraulic Power Unit.
- The Hydraulic System within the Hydraulic Power Unit.
- The Mechanical Assembly and Maintenance of the Top Drive Unit.
- Top Drive Back Up Wrench, and Well Control Valve.
- Troubleshooting and Maintenance.

The course is a mix of theoretical presentations which are supported by practical sessions ensuring that all skills are explained and that participants can demonstrate competence in the activities.

Assessment Process: Candidates are assessed throughout the training, with a 70% competence level against the theory assessments. Candidates must demonstrate competence in all practical activities. Additional training and assessment is available if candidates require this service.

Certificates: Upon successful completion students will receive the Fire & Safety Engineering College certificate.



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map is attached).

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Marketing and Business Development Department.
Tel + 968 24521256, 24512030 Fax: +968 24521042
E-mail: info@fsecoman.com

Price: Dollars 3500 per person including accommodation and meals.

Dates: 27 Sept – 1 Oct 2008 (Saturday – Wednesday).
15 Nov – 19 Nov 2008 (Saturday – Wednesday).
29 Nov – 3 Dec 2008 (Saturday – Wednesday).

Timings: 8 A.M. – 5 P.M.



**Nabors Drilling International Limited (NDIL) In Collaboration With
Fire & Safety Engineering College (FSEC)**

The Electronics System of a Top Drive

Course aims and target group:

This course is aimed at persons who are undertaking the role of Rig Electrician, and who have had little formal guidance in the working and operations of the Canrig Top Drive Electrical Systems. Its purpose is to build on knowledge already in place and expand upon key operational functions to ensure that the electrician can operate more efficiently due to a deeper working knowledge of key components in the electrical systems.

Duration: 5 Days.

Course Contents:

- Canrig Top Drive Models.
- Canrig Top Drive System Manuals.
- Canrig Top Drive System Assemblies and Sub Assemblies.
- Canrig Top Drive System Electrical Schematics.
- Canrig Top Drive System Hydraulic Schematics.
- Canrig Top Drive System Drives.
- Programmable Logic Controllers for the Canrig Top Drive System.

The course is a mix of theory presentations and group discussion in a classroom environment, which is supported by practical sessions, held on live operational equipment.

Assessment Process:

Candidates will have to demonstrate 100% compliance with the practical assessments, and a 70% success rating against the written assessments. There is of course that ability to have further or additional training should a candidate not achieve the required level of competence.



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Certificates: Upon successful completion students will receive the Fire & Safety Engineering College course certificate.

Pre requisite and Scheduling Criteria:

There are no pre-requisites for this training course.
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Marketing and Business Development Department.
Tel + 968 24521256, 24512030 Fax: +968 24521042
E-mail: info@fsecoman.com

Price: Dollars 3500 per person including accommodation and meals.

Dates: 6 Sept – 10 Oct 2008 (Saturday – Wednesday).
4 Oct – 8 Oct 2008 (Saturday – Wednesday).
1 Nov – 5 Nov 2008 (Saturday – Wednesday).
29 Nov – 3 Dec 2008 (Saturday – Wednesday).
13 Dec – 17 Dec 2008 (Saturday – Wednesday).

Timings: 8 A.M. – 5 P.M.



**Nabors Drilling International Limited (NDIL) In Collaboration With
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QHSE / RMS Level 1 Training

Course aims and target group:

This course is designed to provide attendees with exposure to key elements of the NDIL Rig Management System. Although not all attendees will have a direct interface with all of the topics everyone shall have some exposure to each area, and as such gain benefit.

In accordance with the NDIL training matrix, all rig crew should undertake this training, and persons should undertake this training prior to going to the rig site.

Duration: 2 Days.

Course Contents:

- **Employee Visitor Induction:**
Meeting the Visitor and relaying the Present Worksite Status
Emergency Alarms, Muster Stations and First Aid Facilities
Work Area Induction, and SIMOPS Awareness
Hazard Identification and Mitigation.
- **Personal Protective Equipment (PPE)**
Role of PPE in Protecting the Employee and When it is to be Used
Hazard Mitigation through Engineering and Work Practices
NDIL and Employee Responsibilities in Relation to PPE
Examples of and Uses of Various Items of PPE.
- **Job Safety Analysis (JSA)**
Why a JSA is performed
The Benefits of a JSA.
Completion and Execution Responsibilities Relating to a JSA.
The Procedure for Compiling and Reviewing a JSA.



**Nabors Drilling International Limited (NDIL) In Collaboration With
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- **Rigging and Slings**

- The NDIL Lifting Equipment Requirements.
 - Persons Responsibilities in a Lifting Operation.
 - The Equipment Requirements in a Lifting Operation.
 - The Safe Working Practices for a Lifting Operation.

- **Hydrogen Sulphide Gas (H₂S)**

- How to Recognise the Characteristics of H₂S, and how to Detect its Presence.
 - The Emergency Procedure to be Used in the Event of H₂S being encountered.
 - The Types of the Use and the Operation of H₂S Detection Equipment.
 - The Use and Operation of Self Contained Breathing Apparatus (SCBA).

- **Fire Awareness**

- Fire Controls and the Organisation and Management of Fire Drills.
 - The Methods of Fire Transmission and the Structure of Fire.
 - The Identification of and the Appropriate Use of Various Extinguishing Media.
 - Self Rescue Techniques from a Smoke Logged Environment.

The course is a mix of both theory and practical sessions presented in English; however courses can be presented in other languages with prior arrangement with the Training Centre Manager.

Assessment Process:

Candidates are assessed throughout the training, with a 70% competence level against the theory assessments. Candidates must demonstrate competence in all practical activities. Additional training and assessment is available if candidates require this service.

Certificates:

Upon successful completion students will receive the Fire & Safety Engineering College course certificate.



**Nabors Drilling International Limited (NDIL) In Collaboration With
Fire & Safety Engineering College (FSEC)**

Pre requisite and Scheduling Criteria:

There are no pre-requisites for this training course.
Training courses are presented at the NDIL Training Centre, located
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map is attached).

For Bookings and information contact FSEC
Marketing and Business Development Department.
Tel + 968 24521256, 24512030 Fax: +968 24521042
E-mail: info@fsecoman.com

Price: Dollars 1400 per person including accommodation and meals.

Dates: 7 Sep – 8 Sep 2008 (Sunday – Monday).
16 Sep – 17 Sep 2008 (Tuesday – Wednesday).
23 Sep – 24 Sep 2008 (Tuesday – Wednesday).
2 Oct – 3 Oct 2008 (Thursday – Friday).
11 Oct – 12 Oct 2008 (Saturday – Sunday).
20 Oct – 21 Oct 2008 (Monday – Tuesday).
29 Oct – 30 Oct 2008 (Wednesday – Thursday).
7 Nov – 8 Nov 2008 (Friday – Saturday).
16 Nov – 17 Nov 2008 (Sunday – Monday).
25 Nov – 26 Nov 2008 (Tuesday – Wednesday).
3 December 4 December 2008 (Wednesday – Thursday).

Timings: 8 A.M. – 5 P.M.



**Nabors Drilling International Limited (NDIL) In Collaboration With
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QHSE / RMS Level 2 Training

Course aims and target group:

This course is designed to provide attendees with exposure to key elements of the NDIL Rig Management System. Although not all attendees will have a direct interface with all of the topics everyone shall have some exposure to each area, and as such gain benefit.

In accordance with the NDIL training matrix, all rig crew should undertake this training, and persons should undertake this training prior to going to the rig site.

Duration: 3 Days.

Course Contents:

- **Smart Programme**
Methods of Observing People in the Workplace.
How to Approach a Person Carrying Out an Unsafe Act.
How to Conduct a Safety Conversation.
How to Record a Safety Conversation.
- **Crew HSE Meetings**
The Purpose and Type of Crew HSE Meetings.
The Roles and Responsibilities of People in Relation to Crew HSE Meetings.
How to Prepare for, and Conduct a Crew HSE meeting.
How to Follow up, Close Out, and Communicate Action Points from a Crew HSE Meeting.
- **Incident Management**
The Integration of Increased Reporting and Increased Safety Practices.
Incident Investigation Process, Including Reporting and Close Out.
The Documents to be used in an Incident Investigation.



**Nabors Drilling International Limited (NDIL) In Collaboration With
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- **Work Permit System**
The NDIL Work Permit Process.
The Identification of a work Practice that requires a Permit.
The Varying Type of Work Permit.
How to Compile and Review a Work Permit.
- **Dropped Objects**
What the Dropped Object Management System (DOMS) is.
How to Mitigate Damage to People, The Object that could be Dropped Equipment.
The various steps involved in the DOMS Programme and How to Carry Them Out.
The Use of various DOMS control Measures.
- **Fall Protection**
What Fall Protection is and When to Use It.
Hazard Identification and Mitigation.
The Full Body Harness and the Use of a fall protection and Arrest System.
The Pre Use Inspections of Fall Protection Equipment.
- **Confined Space Entry**
The Varying Type of Confined Space in the Workplace.
How to Isolate a Confined Space.
How to Identify Hazards in Relation to a Confined Space.
The Basic Safety Procedures for Working in a Confined Space.
How to Test a Confined Space Prior to Entry.

The course is a mix of both theory and practical sessions presented in English; however courses can be presented in other languages with prior arrangement with the Training Centre Manager.

Assessment Process:

Candidates are assessed throughout the training, with a 70% competence level against the theory assessments. Candidates must demonstrate competence in all practical activities. Additional training and assessment is available if candidates require this service.

Certificates:

Upon successful completion students will receive the Fire & Safety Engineering College course certificate.



**Nabors Drilling International Limited (NDIL) In Collaboration With
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Pre requisite and Scheduling Criteria:

There are no pre-requisites for this training course.
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at the Fire & Safety Engineering College Muscat, Oman. (Location
map is attached).

For Bookings and information contact FSEC
Marketing and Business Development Department.
Tel + 968 24521256, 24512030 Fax: +968 24521042
E-mail: info@fsecoman.com

Price: Dollars 2100 per person including accommodation and meals.

Dates:

- 9 Sep – 11 Sep 2008 (Tuesday – Thursday).
- 18 Sep – 20 Sep 2008 (Thursday – Saturday).
- 25 Sep – 27 Sep 2008 (Thursday – Saturday).
- 4 Oct – 6 Oct 2008 (Saturday – Monday).
- 13 Oct – 15 Oct 2008 (Monday – Wednesday).
- 22 Oct – 24 Oct 2008 (Wednesday – Friday).
- 31 Oct – 2 Nov 2008 (Friday – Sunday).
- 9 Nov – 11 Nov 2008 (Sunday – Tuesday).
- 18 Nov – 20 Nov 2008 (Tuesday – Thursday).
- 27 Nov – 29 Nov 2008 (Thursday – Saturday).
- 5 Dec – 7 Dec 2008 (Friday – Sunday).

Timings: 8 A.M. – 5 P.M.



**Nabors Drilling International Limited (NDIL) In Collaboration With
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Basic Introduction to Electronics for DC Rigs

Course aims and target group:

This course is aimed at persons who are undertaking the role of Rig Electrician, and who have had little formal guidance in the working and operations of the Nabors Electrical Systems on DC Rigs. Its purpose is to build on knowledge already in place and expand upon key operational functions to ensure that the electrician can operate more efficiently due to a deeper working knowledge of key components in the electrical systems.

Duration: 5 Days.

Course Contents:

- Basic Electrical Concepts
- Fundamental Circuit Properties
- Semi Conductors
- The Fluke 123 Oscilloscope
- Circuit Protection and MCC
- Ross Hill ENGINE Generator Controls
- DC Motors
- Ross Hill SCR Controls

The course is a mix of theory presentations and group discussion in a classroom environment, which is supported by practical sessions, held on live operational equipment.

Assessment Process: Candidates will have to demonstrate 100% compliance with the practical assessments, and a 70% success rating against the written assessments. There is of course that ability to have further or additional training should a candidate not achieve the required level of competence.

Certificates: Upon successful completion students will receive the Fire & Safety Engineering College course certificate.



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map is attached).

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Marketing and Business Development Department.
Tel + 968 24521256, 24512030 Fax: +968 24521042
E-mail: info@fsecoman.com

Price: Dollars 3500 per person including accommodation and meals.

Dates: 27 Sep – 1 Oct 2008 (Saturday – Wednesday).
25 Oct – 29 Oct 2008 (Saturday – Wednesday).
22 Nov – 26 Nov 2008 (Saturday – Wednesday).

Timings: 8 A.M. – 5 P.M.



**Nabors Drilling International Limited (NDIL) In Collaboration With
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PACE Simulator Training for HH Rigs

Course aims and target group:

This course is aimed drillers who are using or about to use PACE Joysticks on HH Rigs, this can also be used by Assistant Drillers who wish to develop into the drillers function.

Duration: 5 Days.

Course Contents:

- An Introduction to Rig Types.
- Top Drive Safety Points.
- An Introduction to the Cyber Chair Screen Operations.
- Draw Works, Motors and Bit Feed.
- An Introduction to the Chair Controls.
- Down Hole Problems when Drilling.
- Additional Rig Equipment Information.
- Top Drive Procedures.

The course is a mix of theoretical presentations which are supported by practical sessions ensuring that all skills are explained and that participants can demonstrate competence in the activities.

Assessment Process: Candidates are assessed throughout the training, with a 70% competence level against the theory assessments. Candidates must demonstrate competence in all practical activities. Additional training and assessment is available if candidates require this service.

Certificates: Upon successful completion students will receive the Fire & Safety Engineering College course certificate.



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Pre requisite and Scheduling Criteria:

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For Bookings and information contact FSEC
Marketing and Business Development Department.
Tel + 968 24521256, 24512030 Fax: +968 24521042
E-mail: info@fsecoman.com

Price: Dollars 3500 per person including accommodation and meals.

Dates:
6 Sep – 10 Sep 2008 (Saturday – Wednesday).
27 Sep – 1 Oct 2008 (Saturday – Wednesday).
11 Oct – 15 Oct 2008 (Saturday – Wednesday).
1 Nov – 5 Nov 2008 (Saturday – Wednesday).
22 Nov - 26 Nov 2008 (Saturday – Wednesday).
6 Dec – 10 Dec 2008 (Saturday – Wednesday).

Timings: 8 A.M. – 5 P.M.



**Nabors Drilling International Limited (NDIL) In Collaboration With
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Job Safety Analysis (JSA) for Team Leaders Training

Course aims and target group:

To provide persons who partake in JSA's with the relevant skills to join effectively the risk reduction process. In addition the course shall provide good underpinning knowledge that shall improve the candidates understanding of why the process is so important to the companies business.

Duration: 1 Day.

Course Contents:

- The Culture of Safety
- The Terminology Used in the Process of Assessing Levels of Risk
- The Process of Compiling a Job Safety Analysis (JSA)
- The Nabors Drilling International Limited (NDIL) Job Safety Analysis (JSA) Process

The structure of the course is classroom based however within that there is a great deal of interaction between the candidates and the course facilitator. After initial underpinning briefings, re-enforcement of key points is carried out, by the use of practical exercises. These practical scenarios are conducted as individuals and as part of a small team.

Assessment Process: Candidates are assessed throughout the training, with a 70% competence level against the theory assessments. Candidates must demonstrate competence in all practical activities. Additional training and assessment is available if candidates require this service.

Certificates: Upon successful completion students will receive the Fire & Safety Engineering Course certificate.



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Pre requisite and Scheduling Criteria:

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map is attached).

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Marketing and Business Development Department.
Tel + 968 24521256, 24512030 Fax: +968 24521042
E-mail: info@fsecoman.com

Price: Dollars 700 per day including accommodation and meals.

Dates:

- 5 September 2008 (Friday)
- 14 September 2008 (Sunday)
- 30 September 2008 (Tuesday)
- 9 October 2008 (Thursday)
- 18 October 2008 (Saturday)
- 27 October 2008 (Monday)
- 5 November 2008 (Wednesday)
- 14 November 2008 (Friday)
- 23 November 2008 (Sunday)
- 1 December 2008 (Monday)
- 10 December 2008 (Wednesday)

Timings: 8 A.M. – 5 P.M.



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