# E-learning courses & e-books for the Oil & Gas sector



- Hazardous Area Instrumentation
- Gas Monitors
- Safety Instrumented Systems
- HAZOP (Hazard & Operability Study)
- Hazardous Area Classification
- Variable Frequency Drives

abhisam

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he Oil & Gas Industry is characterized by a high level of engineering technology, a high level of safety and a massive scale of operations in all corners of the world, unrivalled in scope and complexity by any other sector. Starting from prospecting and drilling in the most inhospitable areas of the world, going all the way to refining, processing and retail distribution, it has a complex supply chain that affects almost every citizen of the world.

Personnel working in this industry, need to have a very high level of skills and competencies, spanning a vast array of disciplines, in order to run these massive and complex operations smoothly.

Abhisam Software recognized the challenges faced by the industry in training and skills upgradation of personnel, many of whom are hard pressed for time and cannot allow their training programs to restrict their availability at work.

Therefore, Abhisam Software introduced a series of **e-learning courses**, that allow learners to take training courses **anywhere** they wish, **at a time of their choosing** and **not dictated by the availability of trainers, or classrooms and seminar rooms.** Furthermore, these e-learning courses are not simply some old powerpoint slides made into a rehashed "course", they are carefully designed using interactive animations and simulations, photos, videos and real life examples encountered in the industry, to enable easy learning.

Additionally, Abhisam Software has also created e-books on subjects that are very useful to technical professionals working in the Oil and Gas industry. These e-books are packed with technical content written in an easy style, with appropriate graphics, charts and drawings. These e-books have other user friendly features such as page turning at the click of a button, intuitive layout and menu, ability to make electronic "post-it" notes, bookmarking and searching, that make reading technical books fun and easy.

## **E-learning with a difference**

In the past, many companies were rather disappointed with e-learning, as the costs during those times then were prohibitive and the technology not yet mature.

Today, however, e-learning has come a long way. Abhisam Software's e-learning courses are **very cost effective** (much less expensive than either traditional classroom based training or ancient e-learning courses). They also make use of interactive animations and simulations, real life plant photos, graphics and videos, built-in self assessment tests, in addition to text, to easily convey difficult-to-understand concepts, in a very friendly manner. Moreover, these courses remain with the learners forever, so there is no additional cost of refresher training.

For those learners requiring certification, Abhisam Software offers online tests with scores too. Learners can login to Abhisam Software's Learning Management System on the web anytime and take these tests.

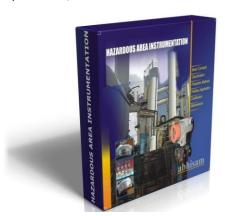
# **Courses for the Oil & Gas industry**

Abhisam Software discovered that there are some very important areas in the oil and gas industry, that were not given adequate attention, in many traditional training programs. These subjects were- Hazardous areas, Gas monitors and Safety Instrumented Systems. Most personnel had to depend on either **rare classroom training sessions**, which were offered by very few institutes (perhaps one had to travel half way round the world to attend a 2 day event held maybe three/four times a year at most). The other alternative was to read difficult and extremely theoretical books and technical research papers, which would require a degree in rocket science to understand, with perhaps little or no relevance to actual situations in industry.

This is the genesis of the present bouquet of course offerings. All of these courses, are designed to be pedagogically sound, vetted by subject matter experts in the industry and used by many classroom trainers themselves, to train their own learners.

## **Hazardous Area Instrumentation**

Hazardous areas are fairly common in almost all stages of the oil and gas industryupstream, midstream and downstream. It is extremely important for all instrument



engineers and technicians, control systems engineers and safety professionals to properly understand and be familiar with all aspects of hazardous areas and the type of instrumentation used in these areas.

There are very few training courses available, that address this need completely and therefore, Abhisam Software introduced this e-learning program that can be downloaded to a learner's PC for perpetual use.

This course is divided into the following six modules:

- 1. Basic Concepts
- 2. Classification (including area, material and temperature classification)
- 3. Methods of protection (popular methods like explosion proof, intrinsic safety, pressurization, increased safety and other techniques are covered )
- 4. Fieldbus in hazardous areas
- 5. Certification and labeling
- 6. Inspections and maintenance

These modules consist of several pages of multimedia content including text, rich graphics, real life photos and Flash animations that make important concepts, crystal clear to the learner. Practical examples make the course very useful as the concepts can be applied immediately to solve actual problems in the learner's plants or facilities. A self assessment test is also included. Additionally, the learner can take an online web based test, on passing, Abhisam will send a printable certificate of achievement.

I purchased the Hazardous Area
Instrumentation e-learning course by
Abhisam. I found this product to be very
informative and easy to understand. A
must have for every Instrument
technician who works in a refinery

M.Dempsey, Western Australia

## Course Delivery Formats-CD, download and Online

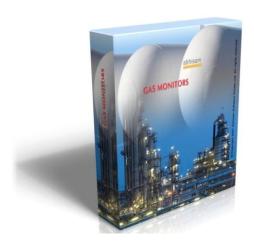
For individual learners, a download link is provided with a license key that is good for use on one computer. A backup CD can be ordered at additional cost.

For companies, a tiered discount based pricing (based on number of licenses) is available. This course can also be offered as an online version for companies that require online access to their learners. Full Reporting is available (user login dates/times, number of hours spent, scores on tests, etc). If necessary the course can also be customized to meet your organizational goals.

For a free demo please <u>click here</u>. For a detailed product brochure, please <u>click here to</u> download.

## **Gas Monitors**

There are hundreds of thousands of gas monitors, used in the oil and gas industry



starting from drilling operations to refining and oil movement and transportation. There was no comprehensive, **vendor-neutral course**, which explained how these gas monitors worked, how to select them and how to use and maintain them effectively, so that they continue to perform as needed and are not just showpieces, to be shown to factory inspectors.

A single, properly working gas monitor, can save several lives and protect property worth millions, **but**, only if it is properly selected and integrated into a working system and maintained properly.

This course, the only one of its kind in the world, enables you to learn all about gas monitors, how they work, how to select the right gas monitor for your application, how to install, calibrate, test and maintain them for getting the best out of them.

The course consists of the following learning units

- 1. Gas Monitor Fundamentals (includes basic concepts, introduction to explosive and toxic gases).
- 2. Types of Gas Monitors (includes catalytic combustion, electrochemical, semiconductor, Infra-red and PID types)
- 3. Gas Monitoring systems
- 4. Installation, maintenance and calibration of Gas Monitors

This course consists of several pages of multimedia content including text, rich graphics, real life photos, explanatory videos, and Flash animations that make difficult-to-understand concepts, crystal clear. Practical examples make the course very useful as the concepts can be applied immediately to solve actual problems in the learner's plants or facilities. A self assessment test is also included. Additionally the learner can take an online web based test, on passing; Abhisam will send a printable certificate of achievement.

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This course is also available as an online version for companies wanting to train their employees or customers at different locations, without having to install any software.

Full Reporting is available (user login dates/times, number of hours spent, scores on tests, etc). If necessary the course can also be customized to meet your organizational goals.

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## **Safety Instrumented Systems**

Safety Instrumented Systems, are one area of the Oil & Gas sector that is much



misunderstood by many. Knowledge about Safety Instrumented Systems is perceived as a hidden art that only a few chosen people know, which is far from the truth. Oil refineries, offshore production platforms and other areas of the oil & gas industry rely heavily on Safety Instrumented Systems, to ensure that all production processes run safely and with minimum risk to life and property. As plants and facilities become more and more automated, with a lesser and lesser appetite for risk, the use of Safety Instrumented Systems is only growing. On the other hand, really

speaking, there is no course presently existing, that could convey all the principles and concepts of Safety Instrumented Systems, **easily**, to most professionals working in Oil & Gas. Abhisam Software has stepped in to fill this gap and has introduced the easiest to learn course on Safety Instrumented Systems ever!

This course consists of the following seven modules that cover all aspects of the subject including **Safety Integrity Level** in detail.

#### The course has SEVEN modules as below

- 1. Introduction to Safety Instrumented Systems (SIS for short)
- 2. Hazards, Risks & their analysis
- 3. Failures & Reliability
- 4. Safety Integrity Level
- 5. SIS Standards
- 6. SIS in practice
- 7. SIS Testing & Maintenance

I have worked in the International Oil and Gas Industry as a technical instructor for more than thirty years. I recommend Abhisam's courses highly to all engineers and technicians in our industry. No praise is too great!!

John Longden, Petroleum Training Institute
(UK)

The modules consist of several pages of multimedia content including text, rich graphics, real life photos and interactive Flash animations, that make concepts crystal clear. Practical examples make the course very useful, as the concepts can be applied immediately to solve actual problems in the learner's plants or facilities. A self assessment test is also included. Additionally the learner can take an online web based test, on passing, Abhisam will send a printable certificate of achievement.

## Course Delivery Formats-CD, download and Online

For individual learners, a download link is provided with a license key that is good for use on one computer. A backup CD can be ordered at additional cost.

This course can also be offered as an online version for companies that have several learners. Nothing needs to be installed on the learner's computers, all access is via the internet. A separate test can be administered and certification for learners who qualify is available. Full Reporting is available (user login dates/times, number of hours spent, scores on tests, etc). If necessary the course can also be customized to meet your organizational goals.

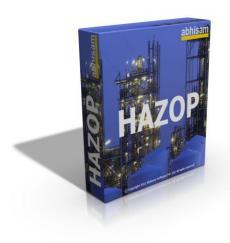
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# **HAZOP (Hazard and Operability Study)**

HAZOP is an acronym for Hazard and Operability Study. HAZOP is a widely used risk assessment and risk management technique in the worldwide Oil and Gas industry in upstream, midstream as well as downstream areas.

Though the technique is widely used, there are hardly any resources available for somebody to learn and master the technique.

Very good course, with perfect structure. I received useful information. I can fully recommend Petr P., Czech Republic



Currently available resources are either printed books (many of which were written ages go and are either out of print, or not very relevant to today's industrial operations) or some white papers floating on the internet or a few classroom style training courses (which may not be at a convenient location or time). Hence Abhisam Software has come out with this stunning e-learning course on HAZOP, that is not just another textbook, but a full fledged e-learning course which has

animated simulations, videos, interactive exercises and other material that make learning a subject (even like HAZOP) fun and easy! The course consists of rich media and matter made with inputs from the world's leading experts in the HAZOP technique, who have a total of several person-years of experience in conducting HAZOPs. The course consists of the following modules:

- 1. Basic Concepts
- 2. HAZOP Methodology
- 3. HAZOP Types, Standards & Legal Requirements
- 4. Managing HAZOPs
- 5. SIS Standards
- 6. Case Study

The modules consist of several pages of multimedia content including text, rich graphics, real life photos and interactive Flash animations, that make concepts crystal clear. Practical examples make the course very useful, as the concepts can be applied immediately to solve actual problems in the learner's plants or facilities. A self assessment test is also included. Additionally the learner can take an online web based test, on passing, Abhisam will send a printable certificate of achievement.

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## Certification

All successful learners of our e-learning courses are awarded certificates on passing



an online test after the course is completed. This online test is hosted on our own Learning Management System. When learners feel ready to take the test, they can request for access. We send an individual login and password for them to access the test, which is administered and scored automatically by the system. Questions are posted from a large data bank of questions.

On getting the passing score a printable certificate of completion is made available.

# **Customization Options**

For larger organizations that need multiple learners to access these courses, we offer a customization service that is very reasonable priced. In fact if the amount of customization is minor, we will not charge for it at all!

So if your company or organization wishes to include your own specific information in these courses, or use own case studies and other data, we can do it for you. This is far faster and less expensive than creating a bespoke (custom) e-learning course on a similar topic.

So if you would like to include your own videos, photos, company mandated standards and procedures in these e-learning courses when you buy them, we can do it! Just let us know.



# **E-Books for the Oil and Gas industry**

Abhisam Software has published e-books on subjects that are very useful to Oil and Gas industry professionals. These include titles on subjects such as Hazardous Area Classification and Variable Frequency Drives.



# The Practical Guide to Hazardous Area Classification

This ebook in DNL format is a practical guide to those engineers and professionals who are looking for an easy way to understand how hazardous area classification is carried out in a typical process plant or facility. This ebook explains the logic behind area classification and covers both the North American and European/IEC systems of area classification.

Furthermore a practical case study of how a facility did its area classification has been covered. Finally the book covers the many mistakes and pitfalls that often accompany area classification. Discover how proper area classification can not only increase the safety of plants and people, but also reduce costs while increasing the safety of the facility! To download a trial version of this ebook please click here. To get more information about this ebook, please click here.

## The Quick Guide to AC Variable Frequency Drives

VFDs or Variable Frequency Drives first appeared on the industrial market about two decades back. Since then, their cost has continuously come down while simultaneously their functionality has increased manifold. This makes it a very attractive proposition to use in modern machinery that runs on AC motors. However, there has been no way for



the user of these devices to easily understand how these superb devices can be used to control ac motors. One had to depend either on the manufacturer's literature, or refer to obsolete books that had nothing related to today's drive technology. Hence Abhisam conceived this easy to read ebook to give a quick but detailed information that is needed to really use these drives effectively.

To download a trial version of this ebook, please <u>click here</u>. To get more information about this ebook, please <u>click here</u>.

## Coming Soon!

# **Upcoming E-learning courses and E-Books**

## **Fieldbus Technology**

This e-learning course will cover all aspects of Fieldbus devices and networks, with a focus on the technology and its usage in industry at a macro level, as well as at a micro level to make it useful and relevant to learners.



Unlike the other "free" presentations and pdfs available online, this e-learning course will be vendor neutral. utilize animations simulations to explain key concepts and have useful engineering and project related information, such as planning a fieldbus installation, justifying a Fieldbus, differences in engineering approach as regards a fieldbus installation (compared to a traditional point to point control scheme), implementing fieldbus in hazardous areas, safety critical aspects of fieldbus and troubleshooting fieldbus installations. Fieldbuses covered will include Foundation Fieldbus, as well as some aspects of Profibus and HART networks.

It is NOT a simple Fieldbus wiring and configuration course that is conducted by many training service providers. This course will be a great resource for the design engineer as well as the O & M engineers and technicians in understanding Fieldbus.

Plus since it resides on your computer all the time, there is no need of paying for any Refresher training! Simply launch the course whenever you wish to refresh your learning. Get more details about this course <a href="https://example.com/here">here</a>.

#### **Level Instrumentation**

This e-learning course will be a comprehensive training product that covers the measurement of level in the process industries. Level is a very important parameter and it can be measured by several different techniques, all of which have their own advantages and disadvantages. This e-learning course will enable the learner to get the equivalent of years of practical experience of how different level measurement devices work, how to select a level measurement technique for your application, troubleshooting and so on.

## **Hydrogen Sulfide Handling**

Hydrogen Sulfide ( $H_2S$ ) is a toxic gas that is found in oil and gas fields (referred to as "sour gas" in the industry), as well as generated as a waste gas in several industrial processes including the hydrodesulferization process used in many crude oil refining units.

 $H_2S$  is also generated in industries such as tanneries, paper mills and coke ovens. It is also capable of forming explosive mixtures with air. All personnel who work in the Oil and Gas, Chemical and related process industries should be aware of "how to handle  $H_2S$  safely". This e-learning course will be an excellent resource to do this.

## **Volatile Organic Compounds**

Volatile Organic Compounds (VOCs for short), have been under the focus of many regulatory and environmental protection organizations all over the world. This elearning course will cover all about VOCs, how to identify VOC emissions, calculate the rate of emissions and commonly encountered VOCs. The course will be an excellent resource for people who work in industries such as paints, chemicals, hydrocarbon processing and environmental organizations.

## The Quick Guide to Reading Electrical Schematics

This book will aim to provide the learner a practical and handy guide on how to read electrical schematics. Many times, engineers and technicians at remote locations get "package" or "skid mounted" equipment such as diesel generators, gas production plants, compressors, etc that have very little documentation like detailed operation and maintenance manuals. What are referred to as manuals are often engineering drawings including electrical schematics, which have to be referred to understand how the equipment works.

## How to order

Ordering is quick and easy via Credit Card (major cards accepted), Paypal, Bank Transfer, Wire Transfer or Check. Our ordering and delivery is processed by Share-It (a division of Digital River). Ordering online is completely secure. Visit our products page at http://www.abhisam.com/products.html

For ordering the multiple user license packs, please contact us directly.

## Contact us:

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