

# Training & Education in Risk and Safety Management for High Hazard Industries

Helping to develop competent risk  
and safety management professionals  
via online and classroom training and  
postgraduate education.





Risktec is an established, independent and specialist risk management consulting and training company, and is part of the TÜV Rheinland Group.

# About Risktec

Risktec was formed with the specific aim of helping clients to manage health, safety, security, environment (HSSE) and business risk, and has been part of the TÜV Rheinland Group since 2014.

We strongly believe the following key factors differentiate us in the marketplace:

## OUR VALUES & CULTURE

The key values underpinning our culture are Teamwork, Integrity, Empowerment and Solutions. We work collaboratively, both within Risktec and when working with clients. We act with honesty, integrity and consistently high ethical standards. We empower everyone to deliver all aspects of a project to the best of their ability in a supportive, open and trusting environment. We are responsive and flexible to our clients' needs, delivering complete and pragmatic solutions.

## OUR INDEPENDENCE

Our independence is achieved through our selected range of services, our company values and our legal structure. Our services are independent from design, construction and operations, and as such we offer truly impartial advice. Our company values include integrity, which means we are open about difficult issues. Finally, TÜV Rheinland has no shareholders with conflicting corporate goals to satisfy, enabling us to take a long-term view in everything we do.

## OUR APPROACH

We are committed to providing clients with solutions, built on a sound understanding of the client's business and the issues they face. Throughout a project we work with our clients to ensure ownership of the solution. We believe this philosophy leads to mutually trusting relationships with our clients. We highlight the positives, but also do not shy away from identifying weaknesses. In this way we help clients to objectively understand their risks and the quality of their systems for managing them.

## CLIENT SATISFACTION

Ultimately it is our clients who decide how well we are doing and we place great emphasis on their feedback. Consequently twice a year we survey the clients of all our active projects and we are delighted to receive consistently high levels of customer satisfaction (see page 10). This feedback drives continuous improvement across the business.



# Our Experience

Risktec has a substantial track record of delivering training and education for many leading companies in the high hazard sectors. In working with us, clients can be assured of high quality technical training and education delivered by experienced consultants, tailored to meet specific circumstances.

## SECTORS

- Offshore and onshore oil and gas drilling and production, refining and chemical sectors
- Civil nuclear power generation, reprocessing, waste management and decommissioning
- Nuclear submarines, dockyards, naval bases and specialist facilities
- Railway, marine and aviation transport, ports and airports
- Renewables sectors including wind and wave
- Manufacturing, pharmaceutical and process sectors
- Insurance and risk-financing services
- Public sector local authorities and fire and rescue services



## TRAINING & EDUCATION CHALLENGES

- Cost-effective solutions
- Learner engagement
- Transfer of knowledge from ageing workforce
- Changing and increasingly complex regulatory regimes
- Improving learning effectiveness
- Reaching global employees and recognising cultural differences
- Ensuring training is relevant



## OUR TRAINERS

- Bring a balanced combination of technical experience and teaching skills - practising industry experts validated by Liverpool John Moores University
- Focused on students' success
- Fully understand the complex issues of risk management
- Highly motivated to assist all participants to improve safety in high hazard industries.



## PARTNERSHIPS & AFFILIATIONS

- Liverpool John Moores University
- Institution of Chemical Engineers
- Institution of Engineering and Technology
- Institution of Mechanical Engineers
- Nuclear Institute
- Energy Institute
- Safety and Reliability Society
- Chartered Institute of Ergonomics and Human Factors





Risktec's expertise is in high hazard industries and other sectors where the impact of loss is high.

# Our Services...

## TRAINING & EDUCATION SOLUTIONS

Our solutions range from single modules for individuals through to multi-year staff development programmes for corporate clients. Our whole approach is flexible to meet client needs by providing varying levels of assessment, different delivery methods, choice of modules, scheduling and locations.



### POSTGRADUATE EDUCATION PROGRAMMES

- Unique partnership with Liverpool John Moores University (LJMU) offers postgraduate degrees in Risk and Safety Management
- Programmes available:
  - Master of Science (MSc)
  - Postgraduate Diploma (PgDip)
  - Postgraduate Certificate (PgCert)
- MSc approved by IChemE as meeting knowledge and understanding requirements for Professional Process Safety Engineer registration

### RISKTEC PROFESSIONAL QUALIFICATIONS

- Risktec Professional Qualification (RPQ) in Risk and Safety Management
- Programmes available:
  - Risktec Assessed Masters (RAM)
  - Risktec Assessed Diploma (RAD)
  - Risktec Assessed Certificate (RAC)
  - Risktec Assessed Specialism (RAS)
- Same content as postgraduate programmes but with lighter assessment
- Designed for students with less time available for study
- Practical, cost-effective learning relevant to industry and situations students are likely to encounter in real world



### UNASSESSED TRAINING

- All courses available with or without assessment
- Content can be tailored to meet detailed client requirements, ensuring value-for-money solution

## DELIVERY METHODS

Risktec's delivery methods are designed to offer maximum flexibility to global organisations and individuals seeking to develop their practical risk management skills, knowledge and experience by the most cost-effective route.

### FACE-TO-FACE LEARNING

- Usually provided to 5 or more participants from same organisation
- Can be tailored to focus on organisation's specific type of operations, risk assessment practices and personnel development needs
- Training is highly interactive, focusing more on activities than lectures
- Open courses are available, allowing individuals to attend classroom-based sessions

### DISTANCE LEARNING

- Risktec's distance learning courses are 100% online, saving travel and accommodation costs
- Students can choose when to study, working at their own pace and from any location
- Modules include slides, notes, videos, online activities, discussions and virtual classrooms
- Online support provided by Risktec's experienced industry consultants

### BLENDED LEARNING

- A mixture of face-to-face and distance learning that maximises flexibility - best of both worlds
- Tailored to client's needs
- Students can study at their own pace yet still benefit from face-to-face access to practising industry consultants, group activities and discussions
- Organisations benefit by committing fewer days to employees away from work
- More effective use of training budgets



### GAME-BASED LEARNING (GBL)

- Games instil a fundamental understanding of key technical safety themes through everyday analogies
- People remember as much as 90% of what they "do" through simulation or experience
- A GBL session is short and snappy, fun, hands-on and accessible to all
- By linking technical safety themes to every day analogies or metaphors, GBL is industry-agnostic



# Our Services...

## PORTFOLIO

Risktec’s programmes and modules can all be delivered as face-to-face, distance or blended learning for client organisations. Module content can be adapted to meet client-specific requirements, and assessment can be used to demonstrate student achievement.

Individual students can study online for the postgraduate and Risktec Professional Qualifications programmes.

### BENEFITS

#### For the client company:

- More skilled resource with formal qualifications or certification and greater staff retention
- Relevant learning, by tailoring case studies and methods
- Up-to-date topics delivered by approved risk practitioners
- A modular approach that maximises flexibility
- Effective use of training budget through targeted, client-specific learning

#### For the student:

- Receipt of formal qualifications from a recognised institution or certification from an industry leader
- Demonstration of learning rather than just attending a training course
- Specific learning, with case studies directly related to the place of work
- Pathways through programmes that are tailored to individual needs

## OUR MODULES

Availability, Reliability & Maintainability (ARM) <sup>2</sup>	HSSE Risk Management for Managers
Bowtie Risk Management <sup>1,2</sup>	Human Factors in Design & Operations <sup>1,2</sup>
BowTieXP Software (Basic and Advanced)	Incident Investigation & Analysis <sup>1,2</sup>
Business Continuity Management	Investigator 3 Software
Culture, Behaviour & Competency <sup>1,2</sup>	LOPA Study
Emergency Response & Crisis Management <sup>1,2</sup>	MSc Project <sup>1</sup>
Enterprise Risk Management	Performance Monitoring, Auditing & Mgmt Review
Environmental Risk Assessment	Principles of Risk Management <sup>1,2</sup>
Fault Tree & Event Tree Analysis	Project Risk Management
Functional Safety of Safety-Related Systems <sup>2</sup>	Research Methods in Risk & Safety Management <sup>1</sup>
Hazard Identification <sup>1,2</sup>	Risk Analysis <sup>1,2</sup>
HAZOP Study <sup>2</sup>	Risk Reduction & ALARP <sup>1,2</sup>
HSE Management Systems <sup>1,2</sup>	Root Cause Analysis
HSSE Leadership for Managers	Safety/HSE Cases <sup>2</sup>
HSSE Leadership for Supervisors	Workplace Safety <sup>2</sup>

### OIL & GAS AND PROCESS

Asset Integrity Risk Management
Engineered Risk Control Systems (Oil & Gas) <sup>2</sup>
Oil and Gas Lifecycle Hazards & Risks
Physical Effects Modelling <sup>1,2</sup>
Process Hazard Analysis
Process Hazard & Risk Analysis (PH&RA) <sup>3</sup>
Process Safety Mgmt in Design & Operations
Oil & Gas & Process Industry QRA <sup>2</sup>
Oil & Gas & Process Industry Risk Studies <sup>2</sup>

### NUCLEAR

Engineered Risk Control Systems (Nuclear)
Implementing a Regulatory Regime
Nuclear Lifecycle Hazards & Risks
Nuclear PSA
Nuclear Reactor Basics
Nuclear Reactor Safety Principles
Radioactive Waste Management
Radiological Protection
Principles of Regulatory Systems

### RAIL

Rail Industry Hazards & Risks
Rail Safety Analysis

### RENEWABLES

Offshore Wind Farm Safety Assurance & Justification
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### MARINE

Maritime Risk Management
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### QUALIFICATIONS:

- 1 Available as a Postgraduate Module (additional modules can be incorporated into bespoke programmes)
- 2 Available as a module within Risktec Professional Qualifications
- 3 TUV Rheinland Functional Safety Engineer (PH&RA) certificate



## UK APPRENTICESHIPS

- Degree Apprenticeship in Risk and Safety Management at Master's level
- Risktec's MSc meets mandatory qualification requirements of Apprenticeship
- Provides evidence of knowledge, skills and behaviours in line with professional registration requirements for Chartered Engineer

## PROGRAMME DESIGN

- Bespoke studies to design training programmes, in partnership with TÜV Rheinland Academy
- High quality and sustainable programmes that can run for multiple intakes for many years to come
- Assurance that the investment in training is justified, targeted and measurable

## CAPACITY BUILDING / TRAINING CENTRE DEVELOPMENT

- Bespoke modular training and education programmes for organisational or national capacity building
- Different training pathways and learning methods to meet individual staff needs and organisational requirements
- Optimum use of locally available and international training blended with Risktec modules and programmes
- Development of business plan for local training centre to deliver sustainable programmes



## CONSULTING & RESOURCE SOLUTIONS

Delivering small, self-contained work packages through to managing complex, multi-disciplinary projects with a large number of stakeholders.

Providing specialist risk, HSSE and engineering associates to work at client offices, project locations or industrial sites anywhere in the world.

### CONSULTING

- Engineering: Identifying, analysing, evaluating and reducing the risks associated with facilities, operations and equipment to acceptable levels
- Management: Identifying, developing and implementing effective policies and procedures to maintain control of risks and minimise loss
- Culture: Accelerating cultural and behavioural improvement, and ensuring a solid foundation for building sustainable improvements in risk control

### RESOURCE SOLUTIONS

- Delivered by our professional resource solutions business, ASTEC, with access to a huge pool of professional associates
- Short-term or long-term assignments

# Client Satisfaction

To continuously improve our training services we request feedback from all of our training course participants.

Reviews of the feedback enable us to address all areas for improvement and build on the aspects that our clients rate the most highly.

The evaluation form asks questions encompassing all aspects of our training services, from trainer knowledge and interaction, to the mix of slides and activities, to the practical application to the participants' job. Participants are asked to provide scores and to add comments where applicable. We are delighted to receive consistently high levels of participant satisfaction across all questions.

Example high levels of client satisfaction:\*

- 99.7% of clients would recommend us.
- 8.9 out of 10 average score for trainer knowledge.
- 8.8 out of 10 average score for positive atmosphere and interaction.
- 8.8 out of 10 average score for trainer presentation skills.

\* Cumulative results to date.

## TESTIMONIALS

**“Overall my experience of studying the Masters was overwhelmingly positive. I am grateful to both Risktec and LJMU for pioneering this course and its model of industry/ academia partnership which is one I intend to pursue and build on for my future career development.”**

Distance learning MSc student

**“Course delivery in an interactive style was both enjoyable and useful.”**

Face-to-face student

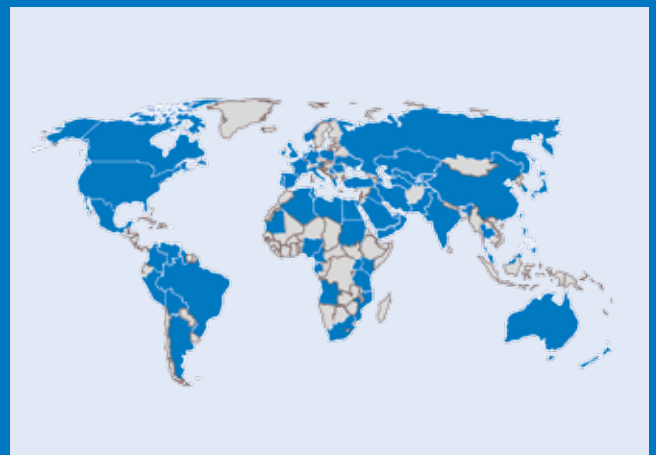
**“Comprehensive course with competent trainer who addresses questions with real examples and takes the time to listen to feedback.”**

Face-to-face student

## Global Experience with Risktec

Risktec has its principal office in Warrington in the UK, with other offices in key locations in Europe, Middle East and North America. Our activities are supported by a comprehensive network of TÜV Rheinland offices and local representatives in other regions around the world. Our intention is to be close to our clients.

We have delivered projects in over 75 countries worldwide.





## RISKTEC OFFICES WORLDWIDE

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Crawley  
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Edinburgh  
Glasgow  
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### **Middle East**

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Dubai  
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### **North America**

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