Our Expert Course Instructor

Dr Graham Edkins is considered one of Australia’s leading Safety Management and Human Factors experts and is regularly retained as an independent safety investigator and human factors expert witness for various civil and criminal matters.

Key Learning Objectives

Upon completion of this course, you will be able to:

► Understand the evolution of human factors, its current scope and how it may contribute to addressing future safety challenges
► Understand human error within the context of significant rail safety incident investigations.
► Incorporate practical proactive error management strategies
► Address human performance limitations that impact effective decision making and increase the probability of error occurrence
► Identify social and group influences that shape human performance
► Adopt a systematic human factors analysis method for incident investigations to better identify errors and error producing conditions

REGISTER NOW>
ABOUT THE COURSE

“A ship in harbour is safe, but that is not what ships are built for.”
- William G.T. Shedd

Regardless of industry type or sector, accident statistics appear to be dominated by the contribution of human error. This is hardly surprising since humans are involved in the design, construction, maintenance, operation and management of complex socio-technical systems across any safety critical industry such as transport, mining, construction, oil and gas, power and water utilities, essential and emergency services and healthcare service delivery.

While human error is a normal part of our human makeup, the consequences of errors in any industry can be disastrous and the subject of public outrage, exhaustive inquiries and drawn out legal action. The cost of human error in the workplace is also considerable:

- BP estimated that the Deepwater Horizon oil spill resulted in costs that exceeded USD $40 billion.
- According to the International Air Transport Association (IATA), airports have estimated that ramp accidents cost over USD $10 billion each year.
- The Flight Safety Foundation report that over 38,000 commercial aircraft land in an unstable condition every year, causing potential maintenance and inspection delays.
- In healthcare the direct medical costs of preventable clinical incidents arising from human error, have been estimated at $2 billion each year in Australia.

This 7-week Fundamentals of Human Factors and Error Management for Safety Critical Industries program will provide participants with a good understanding of the key factors that influence human error and practical strategies for making systems more error tolerant. Upon completion of this program participants have the option of completing a further 4 weeks for the Advanced Human Factors and Error Management for Safety Critical Industries program.

Several practical case studies presented throughout will reinforce generic human factors issues and management solutions across various industries. A comprehensive suite of practical tools, templates and resources are provided to take back and apply in your own workplace.

WHO WILL BENEFIT

This training program is designed for those individuals seeking a comprehensive understanding of applied human factors in any workplace. Expected participants include:

- Operations and Engineering Senior Managers
- Team Leaders and Supervisors
- Human Resource Managers
- HSE and WHS Managers, Investigators and Auditors
- Industry and WHS Regulators
- Quality, risk, compliance and assurance managers

EXPERT COURSE INSTRUCTOR

Dr Graham Edkins
Organisational Psychologist Dr Graham Edkins is considered one of Australia’s leading Safety Management and Human Factors experts and is regularly retained as an independent safety investigator and human factors expert witness for various civil and criminal matters.

As a former Transport Safety Investigator with the ATSB, Manager Human Factors for Qantas Airways, Executive Director of Public Transport Safety Victoria, and Group General Manager for CASA, he brings a wealth of experience and detailed knowledge of contemporary safety regulation, major event investigation and human error management practices.

Dr Edkins has represented both the Victorian and Commonwealth Governments on a number of national forums, including the Standing Committee on Transport (SCOT) Rail Group, Vice Chairman, International Air Transport Association (IATA), Human Factors Working Group, Chair National Rail Safety Regulators Panel and the National Steering Committee for the development of National Rail Model Safety Legislation.

He has successfully designed and delivered customised rail safety investigation and human factors management training programs globally to a variety of public and private sector organisations and cultures.

BENEFITS OF LEARNING ONLINE

Informa Corporate Learning’s online courses are new digital, interactive and engaging educational experience designed to maximise learning for professionals with busy schedules and/or small training budgets.

Our online courses are perfect opportunity for busy professionals as they require just 2 hours per week of your time and include an interactive forum for you to ask direct questions about challenges you are facing to expert course leaders.

Modules are released on a weekly basis, so you can pace yourself alongside your peers and you will have access to a comprehensive set of assets to support your learning such as video content, quizzes and case studies.
Course Outline

MODULE 1:
INTRODUCTION TO HUMAN FACTORS
• Human factors in context
• Human factors: Past, present and future
• The human factors contribution to significant safety accidents
• A simple human factors model
• Case study: Off the rails
• Course activity: Towards 2040 - What will be the human factors challenges in your industry in the next 20 years?

MODULE 2:
INTRODUCTION TO HUMAN ERROR
• Introduction to human error
• What causes error?
• Different types of errors
• The positive side of error: Human compensatory ability
• Course activity: Which error type is it?

MODULE 3:
PRACTICAL ERROR MANAGEMENT STRATEGIES
• Organisational error management strategies
• Managing unintended actions (slips & lapses)
• Managing intended actions (mistakes & violations)
• Error management checklists for inspectors, investigators and auditors
• Course activity: Quiz

MODULE 4:
HUMAN PERFORMANCE LIMITATIONS
• Human information processing
• Task demands: Overload and underload
• Fitness for duty
• Managing human performance limitations in rail
• Case study: Airtime
• Course activity: Participants will examine a flight safety incident to identify human performance limitations and practical management strategies

MODULE 5:
SOCIAL & GROUP INFLUENCES ON PERFORMANCE
• Role, status, authority and conformance
• Strategies to improve team performance
• Case study: Safety incident
• Course activity: Participants will design a program to manage authority gradients

MODULE 6:
A HUMAN FACTORS ANALYSIS METHOD FOR INCIDENT INVESTIGATION
• Human factors analysis methods
• Errors and Error Producing Conditions (EPC’s)
• Reactive Loss of Control Analysis (R-LOCA) model
• Case study: Revisiting off the rails
• Course activity: Quiz

MODULE 7:
MAJOR COURSE EXERCISE #1 - REACTIVE HUMAN FACTORS ANALYSIS
Participants will be provided with the raw data from a video driven safety incident and be required to:
• Use the R-LOCA model to classify the errors and contributing factors; and
• Identify practical strategies to reduce the potential consequences of any errors identified

Would You Like To Run This Course On-Site?

Informa Corporate Learning: On-site & Customised Training
If you have 8+ interested people, an onsite course can be an ideal solution. Speak with Anton Long or Holly Baldwin on +61 (02) 9080 4455 to discuss your customised learning solution, or email training@informa.com.au
Fundamentals of Human Factors & Error Management for Safety Critical Industries

7-week online course  |  2 hours per week  |  7 September – 23 October 2020

Easy Ways to Register

1. **Web**

2. **Telephone**
   - +61 (02) 9080 4395

3. **Email**
   - training@informa.com.au

**Fundamentals of Human Factors & Error Management for Safety Critical Industries**

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**Informa Corporate Learning – On-site & Customised Training**

Informa Corporate Learning has a long-standing track record of delivering very successful customised learning solutions achieving real and measurable value for our clients through our senior training consultants.

If you have 8+ interested people, an on-site course can be the ideal solution – giving you the opportunity to customise our course content to your specific training needs, as well as attracting significant savings compared to public course costs.

**Why Choose On-site With Informa Corporate Learning?**

1. **Custom design** — Together, we will identify the best blended learning solution for your culture, your people and your training objectives.

2. **Quality Assured** — We design market-leading training programs, concepts and methodologies, with a 400+ course portfolio. Our rigorously selected 900+ instructor faculty are recognised experts in their field. Quality of their content and delivery methods is assured through continuous monitoring and evolution.

3. **On-site training** is a cost effective way to train your people and achieve your defined outcomes.

**Our Long Standing Clients Include:**

ActewAGL, Ajilon, Ambulance Victoria, ANU, Arrow Energy, Australian Super, Barrick, BHP, Chevron Australia, Coffey International, ConocoPhillips, CSIRO, Dalrymple Bay Coal Terminal, Department of Education, Department of Planning, Electricity Generating Authority of Thailand (EGAT), ENI Australia, EY, Fortescue Metals Group, Health Purchasing Victoria, IBM, IP Australia, Jemena, Litmus Group, Metro Trains, Office of the National Rail Safety Regulator, Origin Energy, Pacific National, PT Freeport, Public Transport Authority – WA, QGC – BG Group, Queensland Rail, Rio Tinto, Romgaz, SA, South Australia Health, Telstra, Transport & Infrastructure, UBS, Woodside and more...

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