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MINING PROFESSIONAL DEVELOPMENT

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ABOUT

ENTERPRISES UNIVERSITY OF PRETORIA (ENTERPRISES UP)

Enterprises University of Pretoria (Enterprises UP) is a private company wholly owned by the University of Pretoria. Enterprises UP was established in 2000 in the form of two separate entities; Business Enterprises at the University of Pretoria (Pty) Ltd (BE at UP) focussing on advisory services and commercial research and Continuing Education at the University of Pretoria Trust (CE at UP) offering short courses. In 2016, the various entities were consolidated into one company Enterprises University of Pretoria (Pty) Ltd (Enterprises UP).

We are a proudly Southern-African business entity that since 2016 has conducted work in 117 countries around the world. Closer to home, on an annual basis, we conduct work in Eswatini, Lesotho, Mozambique, Namibia and other countries in Africa. Annually we also receive between 400-500 international delegates that attend our training programmes in South Africa.

Nothing brings us more excitement and joy than living out our vision of being a Business Solutions partner of choice, when engaging our clients and delegates in a classroom and/or workgroup setting, our main purpose is simply to transfer knowledge in an applied manner. We believe that a key outcome of following this approach is that we can infuse decision-making about many issues pertaining to our country's socioeconomic needs.

At Enterprises University of Pretoria (Enterprises UP), we focus on empowering individuals and organisations through practical training solutions that build capability, improve performance and drive innovation.

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TRAINING SOLUTIONS AT A GLANCE

Our Training Solutions division promotes lifelong learning through a variety of short courses for individuals, organisations, and communities. Our expert-led courses offer flexible, practical, and tailored learning, ranging from public courses to custom corporate and government training helping delegates to enhance skills, advance careers, and meet evolving professional demands. Academic and support staff with marketable expertise are invited to contribute to course development and delivery, ensuring both academic rigor and real-world relevance.

TRAINING OPTIONS

- **Continuing Professional Development (CPD)**
  - Selected short courses designed to enhance professional skills, update knowledge, and support career growth across various disciplines.
- **Credit-Bearing Courses towards a formal qualification from UP)**
  - Selected courses that carry academic credit and may contribute towards a formal qualification from the University of Pretoria (UP), subject to approval and requirements.
- **In-house (company-specific) or public audiences**
  - Our training can be delivered exclusively for your organisation, addressing your unique challenges, or offered to public participants, creating opportunities for networking and broader learning.
- **Tailor-made training solutions**
  - We design courses to meet the goals and needs of your team or organisation, ensuring the content is relevant, practical, and immediately applicable.
- **Modular programmes, seminars and workshops**
  - Learning can be structured in flexible modules for progressive skill-building, focused seminars for deep dives into specific topics, or interactive workshops that emphasise hands-on practice and engagement.

MODES OF PRESENTATION

- **Online (Synchronous & Asynchronous)**
  - Synchronous: Live online sessions where delegates and lecturers meet in real time for lectures, discussions, and activities.
  - Asynchronous: Self-paced online learning that allows delegates to access training around the clock and complete it at your own pace.
- **Blended**
  - A mix of online learning and contact sessions, combining the flexibility of online study with the engagement and interaction of in-person learning.
- **Contact Sessions**
  - In-person learning opportunities that encourage interaction, networking, and collaboration, allowing delegates to engage, share experiences, and mingle with peers and experts.
- **Distance Education**
  - Flexible learning approach that allows delegates to study remotely. Depending on the course, distance education may include self-paced learning, scheduled online sessions, or limited contact sessions.

CERTIFICATION

Earn a certificate from a world-class, top-ranked University. Receive a certificate of either successful completion or attendance issued by the University of Pretoria.

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ABOUT

CUSTOMISED SOLUTIONS

Enterprises University of Pretoria (Enterprises UP) empowers organisations with flexible, custom-designed training solutions across all industries. Drawing on the expertise of all faculties at the University of Pretoria, we deliver skills development programmes that are relevant, practical, and impactful.
Whether it is executive workshops, short courses, or full programmes, we adapt to your needs. Training can be delivered through face-to-face sessions at your offices or a venue of your choice, as well as online via synchronised (live) or unsynchronised (self-paced) formats; locally and internationally.

Why entities choose our customised training:

- Customised solutions tailored to your industry and needs
- Multidisciplinary faculty from the University of Pretoria
- Global reach in over 117 countries
- Multi-location delivery across formats
- Return on Learning (ROL) approach to measure impact

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CUSTOMISED SOLUTIONS

Research & Consulting

Providing commercial, analytical and consulting services since **2000**

Provided customised training to over **410** clients

Offers short courses in over **140** disciplines across **9** faculties at UP

Offering CPD courses

We have been at the forefront of training and skills development since **2000**

Global coverage solutions

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Introduction to Mining

Department of Mining Engineering

Course Duration: 2 Days

2 SACNASP CPD Points
2 ECSA CPD Points

CLICK HERE TO REGISTER

The Introduction to Mining short course will provide you with fundamental knowledge and insights into mining operations and processes. Aimed at professionals who do not necessarily have a mining engineering degree or diploma, you can acquire a better understanding of mining even if you already work on a mine, work for a mine supplier or own shares in mines. The course focuses on various topics, and you will be exposed to touch points of mining engineering, including hard rock mining, ventilation, rock mechanics and geology, mine planning, open-pit and underground mining methods, logistics and marketing, as well as environmental management.

Learning outcomes

After successfully completing the course, you will be able to:

- Demonstrate a greater understanding of the operational practices that are pivotal to the mining industry.
- Interpret essential terminology and feel more comfortable interacting with core mining staff.
- Appreciate the significance of the mining industry understand the principles of mine design, planning and optimisation.
- Describe the use of open-pit and underground mining methods and equipment.
- Describe the impact of rehabilitation and environmental considerations, and understand the role of processing.

(Paper 1 Preparation)

Chamber of Mines Geotechnical Engineering Practitioner Theory

Department of Mining Engineering

Course Duration: 5 Days

4 ECSA CPD Points and 4 SACNASP CPD Points

CLICK HERE TO REGISTER

The Chamber of Mines Geotechnical Engineering Practitioner Theory (Paper 1 Preparation) short course provides you with a general theoretical background of basic rock mechanics as applicable to all types of mining in preparation for the Chamber of Mines competence examination. Focusing on surface and underground mining, the course covers the syllabus for Paper 1 to gain a better understanding of the themes of stress and strain, constitutive behaviour, rock properties, stress in rock and rockmasses, and rockmass properties. Upon successful completion, you will be prepared to pass the certification to work in a mine.

Learning outcomes

Upon the successful completion of this course, the delegates will have the ability to:

- Comprehend and understand the general rock engineering principles and its application in solving real-world mining problems.
- Apply fundamental scientific knowledge, comprehension and understanding to predict the behaviour of rock materials in real-world mining environments.
- Perform creative procedural design and synthesis of mine layouts and support systems to control and influence rock behaviour and rock failure processes.
- Use engineering methods and understand the uses of computer packages for the computation, modelling, simulation and evaluation of mining layouts.
- Communicate, explain and discuss the reasoning, methodology, results and ramifications of all these aspects in a professional manner at all levels.

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Course in Strata Control: Theory

Department of Mining Engineering

Course Duration: 5 Days

5 SACNASP CPD Points
5 ECSA CPD Points

CLICK HERE TO REGISTER

Under the current Mine Health and Safety Act (1996), a competent person (Strata Control Officer) can assist a legally appointed rock engineer with his/her underground duties under the guidance of the rock engineer. The modules covered in this programme will help candidates prepare for the examination. The programme will be a preparation programme covering the written components and the final practical assessment. The modules cover the theory for all metalliferous mining. The programme will also include a preparation session for the practical exam. This programme offers the candidate contact sessions with a specialist in the field, allowing focused time on the module content without work-related obligations. Practical knowledge and experience are shared within the sessions, enabling peer-to-peer learning. Problem areas and typical complex topics will be discussed as knowledge transfer is promoted.

Learning outcomes

The programme will be aimed at developing the candidates' abilities in the six cognitive levels: knowledge, comprehension, application, analysis, synthesis and evaluation. Thus, when being examined on the topics detailed in this syllabus, candidates would be able to demonstrate their capacity for:

- Comprehending and understanding the general strata control principles covered in this syllabus and applying these to solve real-world mining problems.
- Applying fundamental scientific knowledge, comprehension and understanding to predict the behaviour of rock materials in real-world mining environments.
- Performing creative procedural design and synthesis of mine layouts and support systems to control and influence rock behaviour and rock failure processes.
- Using engineering methods and understanding of the uses of computer packages for the computation, modelling, simulation, and evaluation of mining layouts.

Virtual

Programme in Technical and Operational Surface Mining Excellence

Department of Mining Engineering

Course Duration: 8 Months

5 ECSA CPD and
5 SACNASP CPD Points

CLICK HERE TO REGISTER

This is the virtual option of the programme in Technical and Operational Surface Mining Excellence. All the aspects of mineral resource management are covered, as well as the selection, productive performance, and maintenance of heavy mining equipment. Performance management, operational control, and efficiency improvements of the production processes (drill, blast, strip, load & haul) form an integral part of the course, with reference to support services, mine rehab and closure, as well as statutory requirements. Delegates will be made aware of new technologies and leading software packages to assist the manager of a 2030 mine. The importance of seeking value-added opportunities through the interdependencies in the value chain of a mining operation, from resource definition to marketing of the metal or coal, is conveyed to the delegate.

Learning outcomes

Upon completing the programme, you will be equipped:
Through understanding of the value creation opportunities within a surface mining operation, the delegate will have been empowered to make effective decisions about the operational management, efficiency and improvement initiatives and the technical aspects of the mining operation, as well as the rest of the value chain.

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Programme in Blasting Engineering

Department of Mining Engineering

Course Duration: 10 Months

5 ECSA CPD Points and
5 SACNASP CPD Points

CLICK HERE TO REGISTER

The Programme in Blasting Engineering covers the basics of commercial explosives and the application of commercial explosives in surface and underground mining environments. During the programme, you will acquire the basic theory of blasting engineering and its application, while giving you the chance to interact with experts in the field. You will also expand your knowledge of topics such as the impact of fragmentation on the mining cycle, specialised blasting practices and environmentally-friendly blasting principles and practices. The programme is based on the undergraduate explosives engineering course that is presented in the University of Pretoria's BEng (Mining Engineering) degree programme.

Learning outcomes

The detailed outcomes would be reached as presented in the industry syllabus, however on a broader base, the course will be aimed at developing the delegates ability in the six cognitive levels: knowledge, comprehension, application, analysis, synthesis and evaluation. Thus, when being examined on the topics detailed in this programme, delegates would be able to demonstrate their capacity for:

- Comprehending and understanding the general blasting engineering principles covered in this syllabus and applying these to solve real world blasting problems in the mining and civil environments.
- Applying fundamental scientific knowledge, comprehension and understanding to predict the behavior of blasting outcomes in different types of risks in real world mining environments.
- Performing creative procedural design and synthesis of drill and blast layouts and support systems to control and influence different blast design processes.
- Understanding the greater picture in the total blasting outcomes, downstream effects and the overall evaluation thereof.
- Communicating, explaining and discussing the reasoning, methodology, results and ramifications of all the above aspects in a professional manner at all levels.

Mine Closure and Land Rehabilitation

Department of Mining Engineering

Course Duration: 6 Months

SACNASP CPD 5 Points

CLICK HERE TO REGISTER

The short course in Mine Closure and Land Rehabilitation provides you with an overview of the requirements for integrated mine closure planning, focusing on the legal requirements, general opportunities and threats and practical examples. The course aims to provide you with current information on legislative requirements and government expectations in mine closure. During the course, you will be presented with a structured approach to assist you in planning for the closure of mining operations. The course also covers the ever-important land and soil management component which supports effective closure practices.

Learning outcomes

The candidates will acquire relevant and practical knowledge on mine closure planning which will include important legislative requirements, general challenges & opportunities, lessons learnt from actual mine closure projects and fundamental and applied principles. Candidates will acquire step by step insight on how to approach mine closure projects from a technical and applied perspective. Candidates will learn from technical and field experts with practical experience i.e. regulatory engagement, soil & landform planning, social planning & integration, recommended natural resource management pre- and post-land rehabilitation and post rehabilitation land use management systems etc.

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Programme in Technical and Operational Surface Mining Excellence

Department of Mining Engineering

Course Duration: 10 Months

5 ECSA CPD and
5 SACNASP CPD Points

CLICK HERE TO REGISTER

This short course has been developed to provide the technical knowledge that will enable the delegate to become an effective value-driven manager at a surface mine. Being a short course, the delegates will be exposed to a wide variety of technical and operational aspects of surface mining, rather than being trained in the details of operating a mine. The course content covers the typical value chain for a surface mine, commencing with exploration and mineral resource estimation, followed by the strategic and long-term planning aspect of a surface mine. The delegate will be exposed to mine layouts, shell optimisation, pit design, value-added production scheduling, cost estimation and budgeting. All the aspects of mineral resource management are covered, as well as the selection, productive performance, and maintenance of heavy mining equipment. Performance management, operational control, and efficiency improvements of the production processes (drill, blast, strip, load & haul) form an integral part of the course, with reference to support services, mine rehab and closure, as well as statutory requirements. Delegates will be made aware of new technologies and leading software packages to assist the manager of a 2030 mine. The importance of seeking value-added opportunities through the interdependencies in the value chain of a mining operation, from resource definition to marketing of the metal or coal, is conveyed to the delegate.

Learning outcomes

Upon completing the programme, you will be equipped: Through understanding of the value creation opportunities within a surface mining operation, the delegate will have been empowered to make effective decisions about the operational management, efficiency and improvement initiatives and the technical aspects of the mining operation, as well as the rest of the value chain.

Spontaneous Combustion Course for Coal Mining and Coal Processing Industry

Department of Mining Engineering

Course Duration: 2 Days

2.5 CPD points

CLICK HERE TO REGISTER

The Spontaneous Combustion Course for the Coal Mining and Coal Processing Industry has been developed to offer participants an introductory understanding of the spontaneous combustion phenomenon, a very common and problematic occurrence in coal mining and coal storage. This course aims to expand participants' knowledge of various aspects of the spontaneous combustion phenomenon. This includes a comprehensive understanding of risk assessment, monitoring techniques, and methods for both prevention and mitigation. Additionally, the course emphasises effective management of processes vulnerable to spontaneous combustion.

Learning outcomes

This course aims to expand participants' knowledge of various aspects of the spontaneous combustion phenomenon. This includes a comprehensive understanding of risk assessment, monitoring techniques, and methods for both prevention and mitigation. Additionally, the course emphasizes effective anagement of processes vulnerable to spontaneous combustion.

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Programme in Blasting Engineering: Northern Cape

Department of Mining Engineering

Course Duration: 4 Months

5 ECSA CPD Points and
5 SACNASP CPD Points

CLICK HERE TO REGISTER

The Programme in Blasting Engineering covers the basics of commercial explosives and the application of commercial explosives in surface and underground mining environments. During the programme, you will acquire the basic theory of blasting engineering and its application, while giving you the chance to interact with experts in the field. You will also expand your knowledge of topics such as the impact of fragmentation on the mining cycle, specialised blasting practices and environmentally-friendly blasting principles and practices. The programme is based on the undergraduate explosives engineering course that is presented in the University of Pretoria's BEng (Mining Engineering) degree programme.

Learning outcomes

The detailed outcomes would be reached as presented in the industry syllabus, however on a broader base, the course will be aimed at developing the delegates ability in the six cognitive levels: knowledge, comprehension, application, analysis, synthesis and evaluation. Thus, when being examined on the topics detailed in this programme, delegates would be able to demonstrate their capacity for:

- Comprehending and understanding the general blasting engineering principles covered in this syllabus and applying these to solve real world blasting problems in the mining and civil environments.
- Applying fundamental scientific knowledge, comprehension and understanding to predict the behavior of blasting outcomes in different types of risks in real world mining environments.
- Performing creative procedural design and synthesis of drill and blast layouts and support systems to control and influence different blast design processes.
- Understanding the greater picture in the total blasting outcomes, downstream effects and the overall evaluation thereof.
- Communicating, explaining and discussing the reasoning, methodology, results and ramifications of all the above aspects in a professional manner at all levels.

Open-Pit Mine Planning and Design

Department of Mining Engineering

Course Duration: 5 Days

CLICK HERE TO REGISTER

The Open-Pit Mine Planning and Design short course provides you with a comprehensive look into the basics and key elements of planning and designing a surface mine that uses open-cut or open- cast mining techniques. The course specifically focuses on aspects of the geological resource model right through to the reserve statement and all aspects of the open-pit mine value chain. Not only will you be equipped with a basic theory of open-pit mine design and its application, but you will also receive the opportunity to interact with and gain practical know-how from experts and peers in the field of mining.

Learning outcomes

After successful completion of the course, you will have a better understanding of the open pit mine planning process. The detailed outcomes would be reached as presented in the industry syllabus, however on a broader base, the course will be aimed at developing the candidates abilities in the six cognitive levels: knowledge, comprehension, application, analysis, synthesis and evaluation. Thus, when being examined on the topics detailed in this syllabus, candidates would be able to demonstrate their capacity for:

- Comprehending and understanding the general Open Pit Planning and Design engineering principles covered in this syllabus and applying these to real orebodies and optimising the mine designs.
- Applying fundamental scientific knowledge, comprehension and understanding to predict the behaviour of mine layouts in terms of the different types of risks in real world mining environments.
- Performing creative procedural design and synthesis of short term planning and support systems to control and influence production scheduling processes.
- Understanding the greater picture in the total value chain process and the overall evaluation thereof.
- Communicating, explaining and discussing the reasoning, methodology, results and ramifications of all the above aspects in a professional manner at all levels.

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Risk Management Courses

Online Course for Managers in Risk Management c-MiRM

Department of Mining Engineering

Course Duration: 2 Months

CLICK HERE TO REGISTER

The course aims to thoroughly equip operational managers with internationally recognised best practices that outline guidelines and strategies for establishing and maintaining a robust risk management framework, thereby enhancing vigilance. The module topics emphasise operational resilience and a manager's ability to anticipate, prepare for, respond to, and adapt to disruptions, ensuring the continued delivery of critical operations and services.

Learning outcomes

Delegates will be able to:

- Understand the distinctive tiers and interface between enterprise and operational risk management.
- Master the risk management process from identification to treatment.
- Understanding operational risk taxonomy and vocabulary.
- Accept the tiered approach to risk management.
- Distinguishing common biases and improving risk perception.
- Understanding and categorising static and dynamic risk control and their effectiveness.
- Apprehend why critical controls are substantive.
- Comprehend the principles of monitoring, reviewing, and assuring risk management effectiveness.
- Understand the application of risk assessment techniques relevant to the work scenario.
- Understanding operational resilience and its importance.

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C-MiRM (Course for Managers in Risk Management) – Level 4 – Executives

Department of Mining Engineering

BOOK A MEETING

Enterprise risk management go beyond legal obligations and have the holistic objective with a specific approach to Governance, Risk Management, and Compliance (GRC). This course provide insight to strategic objectives which is subject to risk appetite statements, risk accountabilities, layered approach, and measurement of a risk culture. In this short 5-hour course, Executives gain a comprehensive understanding of the need of a risk appetite statement (RAS) and the dissemination of leading indicators emanating from high level risk decisions and how this influences the risk tolerance at lower echelon decision makers. Unpacking the ISO31000 Risk Management guideline within the international framework of The Committee of Sponsoring Organizations of the Treadway Commission (COSO) provide attendees an objective view of the three lines of defenses used for internal control. Discussions follow that will cover risk assessments, control activities, information and monitoring requirements, control environment and the methods of assurance of the aforementioned. The last session of the course shows practical implementation of an Enterprise Risk Management framework. It allows for dialogues on topics such as risk maturity, risk registers and the use thereof in the boardroom, response plans and critical controls.

Learning outcomes

By attending this course, attendees will be able to:

- Acknowledge the differences between preventable risk, strategic risks, and external risks.
- Recognize the needs for alignment of risk governance on international best practices.
- Identify the structures required for the effective integration of risk management systems.
- Comprehend compliance responsibilities for reporting of key risk indicators.
- Engage effectively and efficiently to the internal control audit framework.
- Validate the presence and efficacy of critical controls within the Bow Tie Analysis control and monitoring regime.
- Develop a risk appetite statement and cultivate understanding of risk decisions.
- Engaging with operational managers on risk maturity and the key risk improvement plans.

C-MiRM (Course for Managers in Risk Management) – Level 3 – Managers

Department of Mining Engineering

BOOK A MEETING

Enhance your risk management skills through our C-MiRM course, designed to equip managers with the tools to establish and maintain a comprehensive risk management framework. Guided by ISO standards like ISO 31000, this course synchronizes risk management processes across various international standards such as ISO 14001 and ISO 45001.

Learning outcomes

By attending this course, attendees will be able to:

- Trace the evolution of risk management.
- Develop action plans for advancing risk maturity based on specific criteria.
- Grasp essential risk management terminology.
- Recognize the links between accident causes, behavioural traits, threat events, and consequences.
- Integrate risk management within a multidimensional framework.
- Apply concepts like SWOT and Force Field analysis to identify risk opportunities for improvement.
- Deconstruct risk categories into vital related components.
- Comprehend diverse risk assessment techniques aligned with company objectives.
- Understand critical controls, management regimes, and vulnerability analysis.
- Recognize the layers of protection needed for critical controls.
- Gain insights into Health and Safety Leadership principles.

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C-MiRM (Course for Managers in Risk Management) – Level 2 – Supervisors

Department of Mining Engineering

BOOK A MEETING

Elevate your risk management skills with the c-MiRM Level 2 course. This comprehensive course offers a structured approach, complete with well-defined guidelines and strategic insights, to establish and uphold a multidimensional risk management framework. Grounded in the principles of the operational risk management layered approach, this course empowers supervisors to conduct formal task-related risk assessments. Across three intensive days, this course delves into each operational risk management layer, outlining the specific responsibilities of supervisors within each tier. It provides a step-by-step methodology that aligns with the course's comprehensive coverage, including management expectations and the overarching goal of achieving zero harm.

Learning outcomes

By completing this course, attendees will be equipped to:

- Comprehend essential risk management concepts and terminology.
- Apply principles for identifying hazards and assessing risks in the workplace.
- Recognize the influence of human factors and decision-making in the context of risk management.
- Validate the effectiveness of control measures.
- Expertly facilitate high-quality risk assessments and Task Evaluations within a team framework.
- Embrace their roles and responsibilities within the risk management layered approach.
- Proficiently implement and oversee the Risk Identifier process, engaging and coaching team members.
- Grasp the principles underpinning critical controls, critical control management, and control verification.
- Understand the requisites of Health and Safety Leadership principles.

C-MiRM (Course for Managers in Risk Management) – Level 1 – Employees

Department of Mining Engineering

BOOK A MEETING

Unveil the structured methodology of operational risk management through the c-MiRM Level 1 course. This course equips participants with clear directives and strategic insights to establish and uphold a multidimensional risk management framework, utilizing the operational risk management layered approach as its foundation. The objective is to enhance the capabilities of all employees, enabling them to actively engage in the risk management process. In this concise 1-day course, participants gain a comprehensive understanding of the operational risk management layers.

The course delineates employee responsibilities, offering a step-by-step methodology for application. The structure is designed to foster clarity among team members regarding:

- Essential safety risk management terminologies and concepts.
- Their role in implementing the four-layered safety risk management approach.
- The tools and techniques necessary to assess and manage risks within their operational scope.

Learning outcomes

By attending this course, attendees will be able to:

- Identify workplace and operating environmental hazards.
- Validate the presence and efficacy of all controls.
- Recognize situations necessitating work cessation and the reporting of unsafe conditions, including instances of inadequate or malfunctioning controls.
- Conduct proficient risk assessments using the designated tools for this specific layer.
- Contribute effectively and efficiently to Task Evaluation processes.
- Cultivate continuous situational awareness, engaging with others to uphold vigilance over surrounding risks and intervene when necessary.

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C-MiRM (Course for Managers in Risk Management) Fundamentals

Department of Mining Engineering

BOOK A MEETING

Our course is designed to equip managers with a structured approach, clear guidelines, and effective strategies to establish and maintain a multi-dimensional risk management framework. By leveraging the principles of ISO 31000, this program harmonizes risk management processes, including the C-MiRM processes, across existing and forthcoming implementations of key International Standards like ISO 31010 (Risk Management Techniques) and ISO 45001 (Occupational Health and Safety Management Systems). This comprehensive course provides a broad perspective on the related International Standards, primarily focusing on Operational Risk Management within a layered approach, addressing risks both horizontally and vertically. The C-MiRM Fundamentals program comprises 7 modules with interactive assignments spanning over a ten-month period. This includes an initial three-day contact session followed by eight monthly contact days, with the final assessment conducted on the tenth day. This arrangement encompasses twelve interactive contact days distributed across ten months.

Learning outcomes

Throughout the course, participants will:

- Evaluate risk management evolution.
- Advance risk maturity with targeted plans.
- Master risk management vocabulary.
- Uncover accident-behaviour-event connections.
- Integrate risk seamlessly in multi-dimensions.
- Apply SWOT, Force Field for risk insight.
- Dissect risk categories effectively.
- Grasp pragmatic risk assessment techniques.
- Understand critical controls and management.
- Appreciate layers for control effectiveness.
- Embrace ISO-compliant Safety Leadership.

C-MiRM (Course for Managers in Risk Management) – Advanced

Department of Mining Engineering

BOOK A MEETING

Empower Safety and Risk Personnel with specialized knowledge in risk management techniques aligned with international guidelines, standards, and best practices. Leveraging ISO 31010 (Risk Management Techniques), this course equips participants with a comprehensive understanding of advanced risk methodologies. c-MiRM Advanced elevates the application of methodologies by providing detailed insights into planning, implementing, verifying, and validating risk management techniques within the scope and framework of ISO 31000. Covering a diverse range of techniques, this course guides participants through the phases of implementing a layered risk approach across horizontal and vertical tiers. These techniques are vital for risk identification, analysis, and evaluation, as outlined in ISO 31000, and are universally relevant whenever understanding uncertainty and its impact on risk is essential. The C-MiRM Advanced program is structured around six modules, each featuring interactive assignments, and is delivered with at least 16 contact days. This is an extensive course having 20 compulsory practical assignments. The course requires each attendee to write 4 examinations allocated to each of the sessions. Examinations consists of Theory, Practical application, comprehension of guiding principles.

Learning outcomes

Throughout the course, participants will:

- Understand the objectives, methodology, advantages, limitations, and use of risk assessment techniques.
- Grasp various risk assessment techniques, ERM, Baseline, Issue based, Lifecycle, Project, HAZOP, FMECA, Bow Tie Analysis Masterclass, FTA/ETA, SWOT and Force Field, Facilitation skills.
- Understand the process of selecting appropriate risk management techniques.
- Comprehend the objectives of distinct risk assessment and analysis techniques.
- Seamlessly integrate risk management techniques within a multi-dimensional framework.
- Apply concepts and methods to proficiently identify, analyse, and evaluate responses in line with established guidelines.
- Gain a firm understanding of using a risk matrix, risk measurement, and trigger mechanisms tailored to each technique.
- Recognize the limitations of techniques within their applicable scope.
- Acquire the ability to devise a change process utilizing principles from SWOT and Force Field analysis.

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Bow Tie Analysis Masterclass

Department of Mining Engineering

BOOK A MEETING

The Bow Tie Analysis Masterclass is a comprehensive training programme designed to equip participants with a practical and proactive approach to risk analysis within the mining and related mineral resources industries. This course focuses on the strategic significance of Bow Tie Analysis, offering a visual framework to compare audit outcomes, accidents, and incidents. Through the analysis of risk identification processes using passive and active controls, participants will gain valuable insights. The course includes hands-on experience with BowTieXP software, enhancing understanding of energy timelines, threat assessment, consequence evaluation, and strategies for mitigating major accidents.

Learning outcomes

Upon successful completion of this course, participants will:

- Acquire a solid grasp of BowTieXP terminology and its application.
- Demonstrate proficiency in organizing data within the software program.
- Develop the ability to establish rules and guidelines for decision-making criteria.
- Gain competence in defining a company's risk appetite.
- Comprehend critical control identification, role classification, and management responsibilities.
- Interpret Bow Tie Analysis diagrams, evaluating their effectiveness and vulnerability against set criteria.
- Break down information into interconnected components, recognizing relationships between accident causes, behaviour traits, and Bow Tie threats and consequences.
- Define escalating factors that can compromise control effectiveness and classify them within cognitive domains and material/equipment categories.
- Create standards for critical control performance, verification, and trigger action response plans (TARPs).
- Utilize deductive reasoning to construct and improve Bow Tie diagrams, devise action plans, and propose cost-effective control measures to enhance integrated risk management objectives.

C-MiRM (Course for Managers in Risk Management) Refresher – Middle Managers

Department of Mining Engineering

BOOK A MEETING

Enhance your risk management expertise with the c-MiRM Refresher course. This refresher course offers a structured approach, guiding you through well-defined guidelines and strategies to establish and uphold a dynamic multidimensional risk management framework. Anchored in the principles of ISO 31000:2018, this course harmonizes risk management processes across diverse international standards, including ISO 31010:2019 (Risk Management Techniques) and ISO 45001:2018 (Occupational Health and Safety Management Systems).

Learning outcomes

Upon course completion, you will:

- Comprehend risk management's evolution.
- Develop actionable plans for risk maturity.
- Master essential risk management vocabulary.
- Discern intricate accident-behaviour-event relationships.
- Integrate risk activities across dimensions.
- Apply innovative concepts like SWOT analysis.
- Break down complex risk information adeptly.
- Grasp practical risk assessment techniques.
- Understand critical control principles.
- Internalize Health and Safety Leadership requisites.
- Safeguard critical controls with protection assurance.

Additional Programmes

- Advanced Programme in Project Management (APPM)
- Agile Project Management
- AI for Project Success: From Basics to Chat GPT in Action
- Business Performance Improvement Programme
- Introduction to Project Management
- Leadership Development Programme for Executive Leaders
- Leadership Development Programme for Middle and Senior Leaders
- Leadership Development Programme for Supervisors and Junior Emerging Leaders
- Leadership for Technical Women
- Programme in Engineering Management
- Programme in Project Management (PPM) Midweek
- Programme in Project Management (PPM) Online
- Programme in Project Management (Weekender)
- Project Management Principles and Practices in Organisations
- Project Management Principles, Practices and Scheduling
- Project Management Professional (PMP®) Exam Preparation
- Workplace Development Programme

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