

Diploma in Surface Mining Explosives Engineering

Introduction

The Institute of Quarrying, in collaboration with EPC Group UK and the University of Derby, have developed a diploma programme.

The programme focuses on enhancing professionalism, safety, and competence within the explosives products and services sector.

Content

- Geology, Surveying and Drilling Operations
- Explosives and Blasting Operations
- Safety, Health, Environment and Sustainability

With aims of:

- Supporting the sector's drive towards improved public perception, total competence, continued improved professionalism and target zero accidents and fatalities
- Addressing the sector's demographic shortfall by the sustained introduction of a younger more diverse workforce

Programme

Module 1 covers geology, geotechnics, rock properties, mine planning, surveying, software for blasting, various drilling methods, downstream benefits, and business ethics.

Module 2 explores explosive history and types, properties, detonators, initiation systems, usage techniques, blast design, shotfiring operations, and contracts involving rock on the ground.

Module 3 addresses legislative history and current laws in health, safety, and the environment. It includes best practices, training, competence, manager rules, environmental factors, contractor management, and sustainability.

Each module will be split 50:50 (coursework: open book end assessment) requiring learners to complete two end of module assessment and an end-point open book assessment, all assessments will be completed online meaning this is an accessible international offering.

The qualification is delivered through online learning, which provides great flexibility for the learner.

Contact us

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The Institute of Quarrying,
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**Learn.
Progress.
Succeed.**

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Duration

The course duration runs up to 12 months

Delivery

Learning materials will be released through a scheduled programme (supported by relevant face-to-face and practical sessions).

All assessments are set and submitted online.

Looking to find out more?


To enquire or find out more information about the programme, visit quarrying.org/explosives

Learning outcomes

- ✓ Execute structured academic or professional research with appropriate methodologies
- ✓ Assess problem-solving approaches for workplace application
- ✓ Craft and assess written/verbal arguments, and generate ideas critically
- ✓ Plan projects to enhance the explosives sector practices including personal areas
- ✓ Apply practical skills in explosives production for mining industry compliance
- ✓ Adhere to explosives-related regulations for manufacturing, transport, and storage
- ✓ Collaborate, display teamwork, negotiation, and organisational skills
- ✓ Employability and skills for the explosives sector and encourages future growth

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Explosives in Quarrying

The Institute of Quarrying's latest handbook is a comprehensive guide aimed at professionals involved in commercial blasting within surface extraction, providing insights into the latest technologies and best practices in the field of explosives.

The handbook also aids those pursuing the IQ Diploma in Surface Mining Explosives Engineering and the Foundation Degree in Mineral Extractives Technology.

To order the handbook and find out more information, visit the online IQ Shop.



www.shopatiq.org/products/explosives-in-quarrying