



THE UNIVERSITY OF ARIZONA
**School of Mining
& Mineral Resources**
GEOTECHNICAL CENTER OF EXCELLENCE

WATER IN MINE OPS AND SLOPE STABILITY

PROFESSIONAL DEVELOPMENT COURSE

COURSE BEGINS JUNE 4TH, 2024

Offered by the GCE and developed in collaboration with...



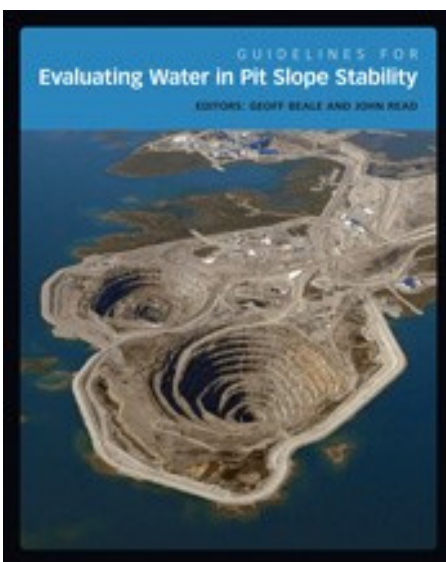
Register now!

COURSE FEE: \$899*

LIVE & ONLINE, this 15-week course includes ~30 hours of pre-recorded content with live, virtual Q&A sessions, where students can engage directly with subject matter experts.

*Discounts available for GCE Members, current students, and groups of 6+

Course content is based on the LOP's *Guidelines for Evaluating Water in Pit Slope Stability* text, with additional and updated material for controlling water in mining operations and improving geotechnical slope stability. The course will also include case studies of water management challenges and solutions in open pit and underground mines.



WHO SHOULD ATTEND?

Engineers, Geologists, Hydrogeologists, Mining Engineers, Managers, other Mining or Geotechnical Professionals interested in gaining a better understanding of the role water plays in mine operations and slope stability.

TOPICS COVERED

Framework and site characterization • Development of a conceptual hydrogeological model • Numerical model applications • Implementation of mine water control systems • Monitoring and design reconciliation • Open pit and underground water management



SCAN THE QR OR CLICK HERE TO REGISTER TODAY!

Questions? Contact the Geotechnical Center of Excellence: gce@arizona.edu

Or visit minerals.arizona.edu/innovation/geotechnical-center-excellence



WATER IN MINE OPERATIONS AND SLOPE STABILITY

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SECTION 1	HOW WATER AFFECTS MINING
	GENERAL INTRODUCTION TO MINE HYDROLOGY
	DEWATERING VS. DEPRESSURIZATION
	PLANNING OF MINE HYDROLOGY PROGRAMS
	DATA COLLECTION
SECTION 2	POROUS MEDIUM VS. FRACTURE FLOW
	CONCEPTUAL MODEL
	EXCAVATION DAMAGED ZONE (EDZ)
	WATER BALANCE AND WATER QUALITY CONCEPTS
	GLOBAL BENCHMARKING
SECTION 3	PLANNING OF NUMERICAL MODELS
	WATER INPUT TO GEOTECHNICAL ANALYSIS
	GROUND WATER AND PORE PRESSURE MODELS
	WATER BALANCE AND WATER QUALITY TOOLS
	WASTE ROCK HYDROLOGY
SECTION 4	STRATEGIC PLANNING
	SLOPE DEPRESSURIZATION
	SURFACE WATER MANAGEMENT
	IN-PIT REAL ESTATE AND ACCESS
	SITE-WIDE WATER MANAGEMENT
SECTION 5	MONITORING PROGRAMS
	PERFORMANCE ASSESSMENT
	INTERACTIVE PLANNING AND RISK MANAGEMENT
	GEOTECHNICAL AND HYDROGEOLOGICAL GUIDELINES FOR MINE CLOSURE
	NINE KEY INDUSTRY ISSUES

END OF COURSE GEOTECHNICAL WATER MONITORING MINI-SYMPOSIUM

SUBMIT A CASE STUDY OR WATER-RELATED PRESENTATION AND RECEIVE 50% OFF YOUR NEXT COURSE!