WHY THE UNIVERSITY OF ARIZONA?

• Excellence in mining education since 1885 and home of the UA Lowell Institute for Mineral Resources
• Leadership in the 4th Industrial Revolution
• Leading research institution across many disciplines
• Part of a world-class mining region and geotechnical hub
• History of being stakeholder driven

MINING INNOVATIONS FOR A CHANGING WORLD

Mining has been changing at a faster pace than ever before because of the increasing demand for the materials we produce, and the speed of technological advances, as well as the quickly evolving social priorities around safety, the environment, and social license to operate. Mining companies now mine deeper, faster, and closer to communities than ever before.

The Geotechnical Center of Excellence is a stakeholder-led organization, working across the University of Arizona, the mining industry and other institutions to:

• develop innovative geotechnical solutions;
• deliver graduates from multiple disciplines prepared to work in the geotechnical field;
• provide critical professional development training.

MINDS OVER MINERALS™

minerals.arizona.edu

GEOTECHNICAL CENTER OF EXCELLENCE

Hydrogeology
– Pore pressure
– Dewatering
– Surface water

Mining & Geological Engineering
– Mine design
– Slopes/underground

Geology
– Geologic modeling
– Data acquisition

Civil Engineering
– Soil mechanics
– Tailings design

System & Industrial Engineering
– Early warning
– Integration

Electrical Engineering
– Sensors
– Communications

Applied Mathematics
– Numerical modeling
– Statistical analysis
– Next generation computing

Computer Science
– Data aggregation
– Machine learning
– Gamification in education
NEW AND LARGER RISKS
Because the operations are larger and often closer to communities, the impact of geotechnical failure can be devastating and measured in the number of lives lost, costs in billions of dollars, square miles of environmental damage and loss of reputation for individual companies and the industry as a whole.

BRINGING SOLUTIONS
The Geotechnical Center of Excellence will deliver innovative solutions through multidisciplinary research, graduates from a variety of disciplines that understand geotechnical issues, and professional development training to prepare current employees to work in the 4th Industrial Revolution.

BECOME A MEMBER
Memberships are available with varying levels of benefits. Visit our website to learn more!
- Board Level Partner
- Leadership
- General
- Associate
- Technical Advisor

CONTACT
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