

TEACHING ROCKS!



THE UNIVERSITY OF ARIZONA
School of Mining
& Mineral Resources

► MINING.ARIZONA.EDU

MINING RULES!



PROFESSIONAL
DEVELOPMENT



LESSON
PLANS



CTE &
STEM



FIELD
TRIPS



CLASSROOM
VISITS



ONLINE
ENGAGEMENT



MINING & MINERALS Education PROGRAMS

Interactive instruction or virtual presentations & workshops for grades 5 through community college.



Our Mining & Minerals education outreach programs, which is led by the School of Mining & Mineral Resources, provide interactive instruction or virtual presentations & workshops for grades 5 through community college. Our programs are designed to provide students with a hands-on learning experience that is both fun and educational. We offer a variety of programs, including field trips, classroom visits, and online engagement. We also offer professional development for educators and industry professionals. For more information, please visit our website at mining.arizona.edu.



<https://bit.ly/4527g07>

Program Contacts
Chris Earnest
Education Outreach Coordinator
Phone: (520) 924-1522
Email: cearnest@mining.arizona.edu



Engage Students with Interactive Learning

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College & Career Fairs
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University Tours
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Mineral Discovery
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San Xavier Mine Tours
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Cu at the Mine!

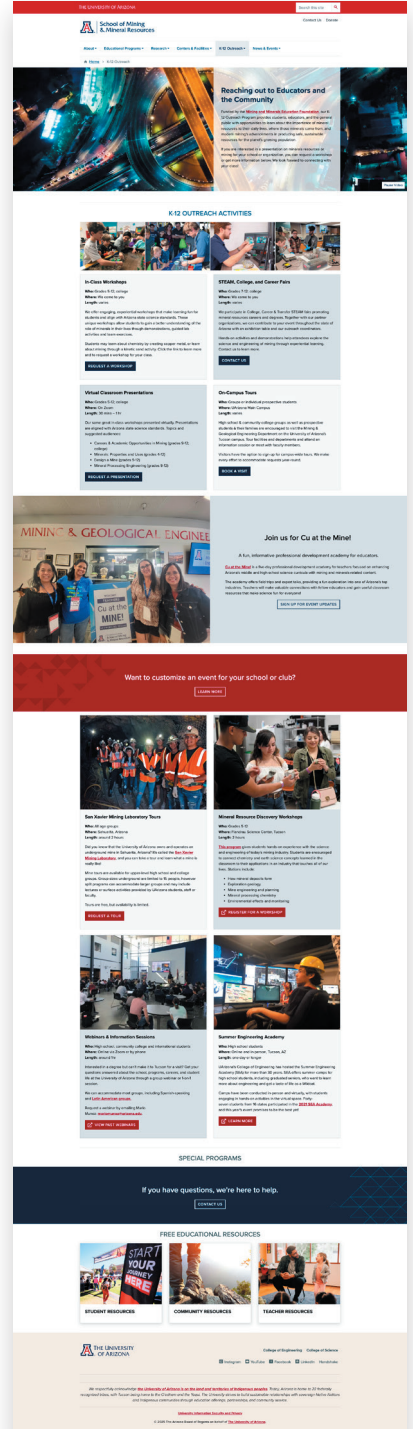
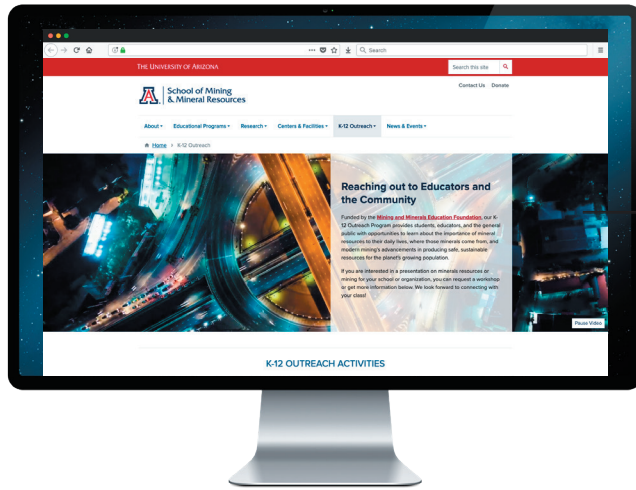
Join us at Cu at the Mine!—a fun and interactive program for students and educators. We offer a variety of programs, including field trips, classroom visits, and online engagement. We also offer professional development for educators and industry professionals. For more information, please visit our website at mining.arizona.edu.

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LET'S CONNECT!

RESOURCES FOR TEACHERS

ENGAGE STUDENTS INTERACTIVE LEARN

Our team travels statewide to provide interactive programs and hands-on workshops focused on STEM & academic exploration. All presentations aligned with state education standards.

InClass Workshops

- WHO? Grade 3 through undergraduate
- WHERE? Online or in your classroom
- LENGTH? +/- 1 hour

Topics Include:

- Careers & academic pathways in mining (Grade 9 through undergraduate)
- Mineral properties & uses (Grades 9-12)
- Design a mine (Grades 9-12)
- Mineral processing engineering (Grades 9-12)

College and Community

MINING & MINERALS

COMMUNITY EDUCATION PROGRAM

Interactive in-person or virtual presentations & workshops for grades 5 through community college.

San Xavier MINE TOURS

WHO? All age groups
WHERE? Sahuarita, Arizona
LENGTH? 2-3 hours

Did you know that the University of Arizona has its own underground mine? In Sahuarita, AZ, the San Xavier Mining Laboratory offers free mine tours for upper-level high school and college groups interested in science, geology, and geophysics. Grab a hard hat and go underground in this dynamic field trip.

Mineral Discovery PROGRAM

WHO? Grade 6-12
WHERE? Flandrau Science Center, Tucson, AZ
LENGTH? 2 hours

This program introduces the mineral resources that touch all of our lives and gives students hands-on experience with scientific and engineering processes used in modern mining. Students are encouraged to connect chemistry and earth science concepts learned in the classroom to real-world applications in this fun, interactive program.

Cu at the Mine!

Minerals and Mining Education for Arizona's Green Energy Future

WHAT YOU WILL GAIN:

Pedagogical Content Knowledge

What role should minerals & mining play in AZ's 6-12 science curriculum?

Industry Knowledge

There are over 100 different careers available in the mining industry.

A Strengthened Network

Connect with educators, industry experts, and academics in mining & geosciences fields.

Minerals are driving the technologies of the Green Revolution.

In this **four-day professional development academy**, deepen your understanding of the role that minerals and mining could play in your classroom curriculum through engaging AZ Science Standards-aligned lessons, exciting field trips, expert guest speakers, and plenty of time for collaboration with like-minded and innovative educators from around the state.

\$1000 STIPEND

UP TO 40 PD HOURS TOWARD RECERTIFICATION

8 READY-TO-USE LESSON PLANS

MINIMUM OF \$100 WORTH OF TEACHING SUPPLIES

THE UNIVERSITY OF ARIZONA
School of Mining & Mineral Resources

June 24th - June 27th, 2024

LEARN MORE

OUTREACH EVENT BOOKING SYSTEM

Outreach Connect

What type of activities are you interested in?

- ☐ In-Classroom
- ☐ Virtual Presentations
- ☐ Virtual Workshops
- ☐ Virtual Field Trips

Next Step

Outreach Connect

What region are you in?

- ☐ Northern Arizona
- ☐ Central Arizona
- ☐ Southern Arizona

Next Step

Outreach Connect

Please identify an available date from the calendar below, then fill in the date below:

Joshua Wayne Page

STEM Fair Availability: ☐ Yes ☐ No

Classroom Workshops Availability: ☐ Yes ☐ No

Next Step

Outreach Connect

Please identify an available date from the calendar below, then fill in the date below:

Joshua Wayne Page

STEM Fair Availability: ☐ Yes ☐ No

Classroom Workshops Availability: ☐ Yes ☐ No

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STEM Fair Availability

STEM Fair Availability: ☐ Yes ☐ No

Classroom Workshops Availability: ☐ Yes ☐ No

Next Step

MINING.ARIZONA.EDU



THE UNIVERSITY
OF ARIZONA

Mining &
Geological
Engineering

SAFE, SUSTAINABLE MINING

- Expert Faculty
- Industry-Leading Research
- Undergrad, Master's, PhD,
Professional Development



THE UNIVERSITY
OF ARIZONA

School of
Mining & Mineral
Resources

SMMR'S RESEARCH & INNOVATION FOCUS:

ADVANCING THE
SUSTAINABILITY OF
MINING



SCAN ME TO ACCESS THE DIGITAL VERSION OF OUR RESEARCH BROCHURE!



School of Mining
& Mineral Resources



**SCAN ME
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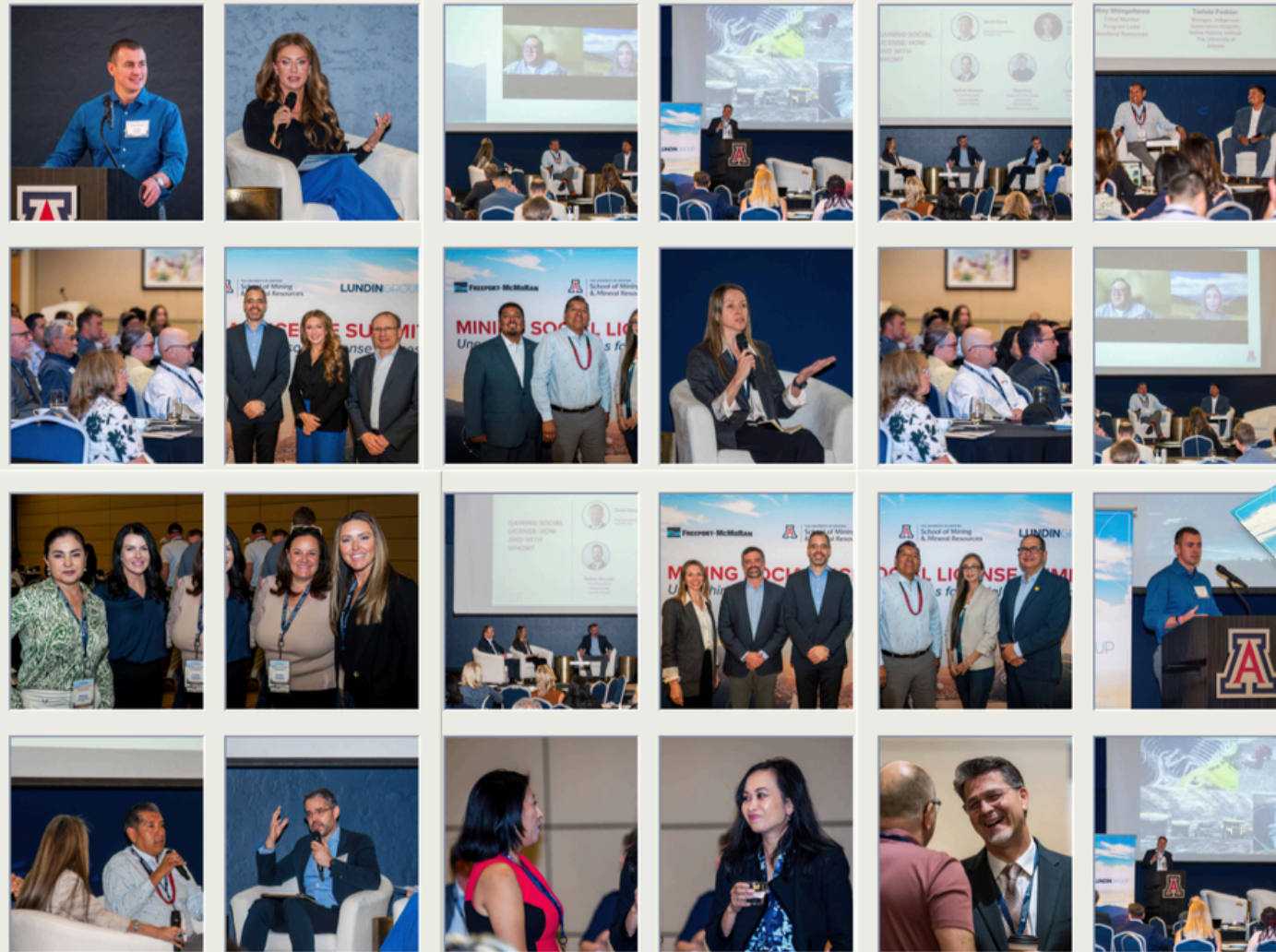




Freeport-McMoRan



THE UNIVERSITY OF ARIZONA
School of Mining & Mineral Resources



MINING SOCIAL LICENSE SUMMIT

Unearthing best practices for social license success



CERTIFICATE OF ATTENDANCE

MINING SOCIAL LICENSE SUMMIT

This certificate is presented to

Cain Zapata

April 25-26, 2024 at the University of Arizona, Tucson, AZ USA

THE UNIVERSITY OF ARIZONA
School of Mining & Mineral Resources



Miguel Cabrera, PE
DIRECTOR, SCHOOL OF MINING & MINERAL RESOURCES



LUNDINGROUP



THE UNIVERSITY OF ARIZONA
School of Mining & Mineral Resources

Graduate Certificates in MINING & GEOLOGICAL ENGINEERING

100% ONLINE!

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LEARN MORE

Graduate Certificates in Mining and Geological Engineering

Unearth New Opportunities with Advanced Mining Courses

Advanced and state-of-the-art courses with specialized content from the University of Arizona. The experience includes a hands-on learning in mining field, quality, research, and innovation.

Advanced Training to Propel Your Career

Master your career in the mining industry with an advanced certificate from the University of Arizona. Research-based courses provide the skills, knowledge, and training necessary to advance your career in the mining industry.

Graduate Certificates in Mining and Geological Engineering

These certificates are designed to advance your knowledge and skills in the mining industry.

- Mining & G.E. a comprehensive introduction to mining for professionals with no mining background
- Advanced Certificate in Geomechanics / Rock Mechanics
- Advanced Certificate in Mining Occupational Safety and Health
- Advanced Certificate in Mine Production and Information Technology
- Advanced Certificate in Mineral Processing and Extractive Metallurgy

Ready to get started?

[Request more info](#) [Apply now](#)

THE UNIVERSITY OF ARIZONA

College of Engineering College of Science

Engineering Technology

Our research advances the University of Arizona as one of the most innovative institutions in the world. The University of Arizona is a leading institution in the world for research and innovation in the mining industry. We are committed to providing the highest quality education and training to our students.

Mineral Resource Development

MASTER OF ENGINEERING IN MINING, GEOLOGICAL AND GEOPHYSICAL ENGINEERING

100% ONLINE MASTER'S DEGREE

Mining and material production provides the building blocks for products and technologies that are essential to industries and the global economy. This field offers some of the **highest earning engineering careers**, as well as opportunities to develop sustainable solutions that will power our future.

The University of Arizona is one of the nation's leading institutions for the study of mining and geological engineering.

Our online Master of Engineering in Mining, Geological & Geophysical Engineering is one of the only online programs of its kind, featuring courses taught by our faculty of ground-breaking researchers in mineral engineering and the science of non-renewable resources. You'll gain an advanced understanding of core technical principles while also pursuing coursework in finance and management, natural resource law, and other administrative concerns. Armed with this focused skill set, you'll be well prepared to pursue mining and geological engineering roles as well as other opportunities in the field.

Customizable Options Include:

- Geomechanics
- Mining and Production Technology
- Mine Health and Safety
- Mineral Processing
- Sustainable Resource Development

Each mining engineering online course is led by expert researchers and industry executives and features a curriculum that blends live instruction with a convenient, asynchronous online format. Earning a mining and geology master's online empowers working professionals to enhance their career prospects, with most part-time students completing the program in 18-24 months. The program is a perfect fit for aspiring and practicing engineers, those looking to make a career change to mining or a related field, and others with an interest in mining.

The Master of Engineering (ME) program is designed to be flexible and dynamic.

We strive to accommodate aspiring and practicing engineers, those looking to make a career change to mining or a related field, and those with an interest in mining. Some courses in the online Master of Engineering in Mining, Geological and Geophysical Engineering are in a live, interactive format, while others are offered in an asynchronous, on-demand structure. Additionally, some courses will run for the entire duration of a semester, but some short, intensive courses may last as little as 2 to 3 days or 2 weeks of class time. Visit the website below for more details.

LEARN MORE

mining.arizona.edu/mge-online-masters

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Essential Industries & High Earnings

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Online Convenience, Expert Led, Designed for Professionals

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Join a Boundless Tradition of Innovation & Achievement

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Curriculum

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Ready to get going on your Masters?

[Request more info](#) [Apply now](#)

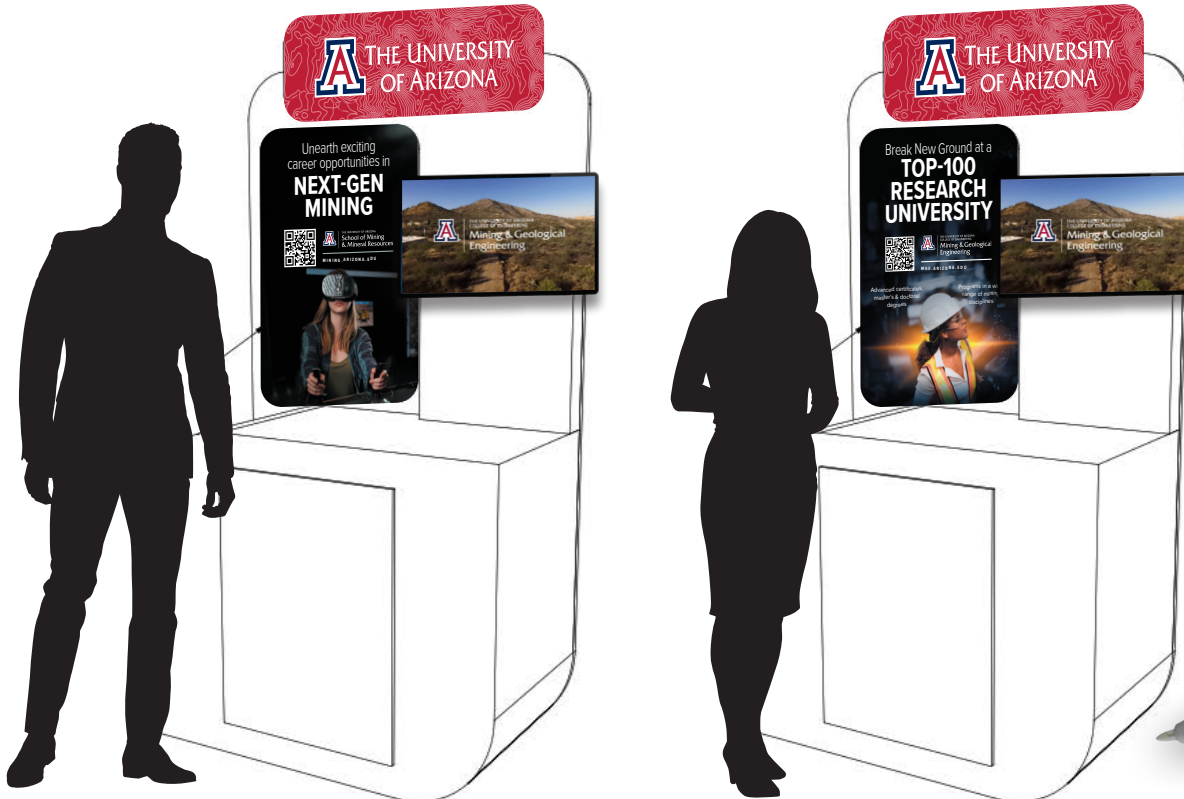
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