

One Hundred Eighty-Eighth Commencement

Saturday, December Sixteenth
Two Thousand and Twenty-Three
The Monument Theatre

ORDER OF CEREMONY

Master of Ceremonies Dr. Lance Roberts

Processional (Stand) Mines String Theory

Pomp and Circumstance by Elgar

Rondeau by Mouret

Presentation of Colors Army ROTC Color Guard

President's Message Dr. Jim Rankin

Senior Class Representative's Message Ms. Morgan Else

Message from the Board of Regents Mr. Douglas Morrison

Presentation of Honorary Degrees Dr. Jim Rankin

Commencement Address Mr. Linn Evans

Conferral of Degrees Dr. Jim Rankin

Presentation of Degree Candidates Dr. Joseph Dlugos

Alumni Welcome Mr. Rich Wells

Retirement of Colors Army ROTC Color Guard

Recessional (Stand) Mines String Theory

La Rejouissance by Handel

SOUTH DAKOTA MINES STRING THEORY

Tammy Schnittgrund, Director Emily Kolbe
Gillian Clark Tristen Olsen
Aaron Johnson Bennet Outland

SENIOR CLASS REPRESENTATIVE

Morgan Else

Morgan Else came to South Dakota Mines after graduating from Brandon Valley High School in Brandon, SD. Her parents are Wade and Melinda Else. She has one brother, Adam, and a sister-in-law, Karlie.

Ms. Else has been involved in various clubs and activities while at South Dakota Mines. She served on the Student Association Senate, as president and Greek Council representative of Beta Delta Mu, president of the Order of Omega, vice president of Circle K International, a member of Alpha Pi Mu, and a mentor for Women in Science and Engineering (WiSE). She was inducted into the South Dakota Mines Leadership Hall of Fame in 2023.

After graduating with her Bachelor of Science degree in industrial engineering and engineering management, Ms. Else will be working at Nucor Fastener in St. Joe, Indiana.

HONORARY DOCTOR OF PUBLIC SERVICE

Renita Mollman

Renita Mollman received a bachelor's degree in civil engineering from South Dakota Mines in 1988. She is the chief administrative officer and senior vice president for Burns & McDonnell, a \$6.9 billion global engineering and construction firm. She is also a member of the firm's Board of Directors. In her role, she oversees corporate services including human resources, marketing, communications, security, travel, fleet and facilities. Additionally, she leads the COVID-19 Response Team.

Ms. Mollman joined Burns & McDonnell in 1988 as a civil engineer, providing design and construction services across the U.S. Throughout the next two decades, she supported more than 100 projects for multiple aviation and military clients. In 2009, she was promoted to general manager for the California region and in 2011 was promoted to vice president. Under her leadership, this regional team grew from just a few employees to more than 250. The firm was named a best place to work seven times in southern California and revenue nearly quadrupled.

Her influence extends into mentoring, with an emphasis on promoting women in science, technology, engineering, and math (STEM). Ms. Mollman helped form the Professional Women's Exchange at Burns & McDonnell, which allows women to meet monthly to discuss challenges and learn from and engage with professionals. Additionally, she serves on the Women United Board for the Greater Kansas City United Way, the South Dakota Mines Center for Alumni Relations and Advancement (CARA) Board and the School of Engineering Professional Advisory Board at University of Missouri – Kansas City. She previously held board positions for the Southern California Minority Supplier Development Council, the Civil & Environmental Engineering Professional Advisory Board at South Dakota Mines, and Girls Inc.

Further, Ms. Mollman was named a Woman of the Year by the San Diego Business Journal, Woman of the Year in 2017 by the Regional Hispanic Chamber of Commerce in Long Beach and the Women's Transportation Seminar (WTS)-San Diego Woman of the Year in 2015. In 2021, Kansas City Mayor Quinton Lucas appointed her as the chair of the City's COVID-19 Vaccine Task Force to ensure the vaccine process was completed in an efficient and equitable manner.

While her home is in Kansas City, Missouri, Ms. Mollman is a frequent traveler enjoying unique destinations from Antarctica to the Galapagos Islands.

HONORARY DOCTOR OF PUBLIC SERVICE

Linn Evans

Linn Evans became a member of the Black Hills Corporation Board of Directors in 2018 and was appointed president and chief executive officer in January 2019. Mr. Evans joined Black Hills Corp. in 2001 and served as president and chief operating officer from 2016 to 2018, and president and chief operating officer – utilities from 2004 to 2015. He also served as associate general counsel, and vice president and general manager of the company's telecommunications, cable television and internet services business, Black Hills FiberCom. He gained deep operations management experience within the mining industry in underground gold, iron ore, lead, and zinc mines throughout North and South America.

Prior to joining Black Hills Corp., Mr. Evans practiced law with private firms representing international mining companies in various areas, including corporate law, local, state, and federal permitting, property rights, mineral taxation, imminent domain, and civil and regulatory litigation.

He represents Black Hills Corp. on the boards of the Edison Electric Institute and the American Gas Association and serves on the South Dakota Mines University Advisory Board and the Sanford Underground Research Facility Foundation Board. He holds a Bachelor of Science degree in mining engineering from Missouri University of Science & Technology, and a Juris Doctor degree from the Northwestern School of Law of Lewis & Clark College, with a certificate in environmental and natural resources law.

Mr. Evans and his wife, Gloria, enjoy serving on several local charitable boards and advisory committees and are the proud parents of three daughters.

GRADUATE DESIGNATIONS

BACHELOR OF SCIENCE DEGREE

*	Cum Laude	White Tassels	3.50 - 3.69 GPA
**	Magna Cum Laude	Red Tassels	3.70 - 3.89 GPA
***	Summa Cum Laude	Gold Tassels	3.90 - 4.00 GPA

ASSOCIATE OF ARTS DEGREE

•	Honors	3.50 - 3.69 GPA
••	High Honors	3.70 - 3.89 GPA
•••	Highest Honors	3.90 - 4.00 GPA

DOCTOR OF PHILOSOPHY DEGREE CANDIDATES

Atmospheric and Environmental Sciences

Patrick Kenneth Kozak †

Dissertation Title: Controls and Effects of Salinization on Water, Wildlife, and Rangelands in Northwestern, South Dakota

Chemical and Biological Engineering

Whytneigh Rose Duffie †

Dissertation Title: Synthesis, Characterization, and Application of Novel Surface-Eroding Anhydrides

Jordan Alex Hoops

Dissertation Title: Characterization of Acute and Repeated Oxidative Stress Response in Human Pulmonary Cells and Formulation of Antioxidant Intervention

Sebnem Ozbek †

Dissertation Title: Exploring Deposition of Polymer Particles via Cold Spray:

Processing Parameters and Substrate Conditions

Dipayan Samanta †

Dissertation Title: Enhancement of methane oxidation rate in M. trichosporium OB3b

Geology, Geological Engineering, and Mining Engineering

Amy Louise McBrayer†

Dissertation Title: Area Mine Production Schedule Optimization with Variable Cost Considerations

Nanoscience and Nanoengineering

Jinyuan Liu †

Dissertation Title: Photothermal Nanomaterials for Modulating Phenotype Transition and Attenuating Migration and Drug Resistance of Cancer Cells

Ding Lou †

Dissertation Title: Hydrogen Bonding-Assisted Thermal, Electrical, Anti-Friction, and Anti-Corrosion Properties of Nano Greases/Composites with 1D/2D Hybrid Nano Additives

MASTER OF SCIENCE DEGREE CANDIDATES

Atmospheric and Environmental Sciences

Vicki Marie Kelsey

Biomedical Engineering

Matthew James Holler lustin Bernard Statile

Chemical Engineering

Calvin Everett Burkholder Eleni Nikol Moutsoglou † Juwon Kehinde Olowonigba

Civil and Environmental Engineering

Collins Antwi Boasiako Emma Leigh McCalmont Ethan Jacob Stebbins Josie Kay Tornberg

Computer Science and Engineering

Reza Morovatdar ††
Samuel John Ryckman
Karissa Linae Schipke
Devon A. Schneider

Construction Engineering and Management

Mehmet Alkurtar †
Kaycee Jo Cipriaso
Mark William Ellis ††
Harrison David Irwin †
Jonathan Moreno Jr.
Abhishek Ray

Engineering Management

Shyann B. Bastian
Joel Daniel Haas †
Anna Joy Haydock
Iorsamber Joshua Igbax
Nicholas Michael Kuzjak ††
Ariana Elizabeth Miller †
Willem Purcell Peters
Andre David Rebol
Matthew Sindelar †

Geology and Geological Engineering

Edward Owusu Anokye
John Richard Farmer †
Spencer Grant Lofter Larsen
Raynor Austin Ratchford

Mechanical Engineering

Matthew J. Dietz
Austin Samuel Gutknecht †
Michael Benjamin Linde
Wyatt Ward Wiening

Mining Engineering and Management

Tel Ky Bostwick
Alexandra Leigh Gregor
Gregory Vernon Griffith
Luis Fernando Larota Machacca
Princess Akela Punch
Isaac Andrews Tandoh

Physics

Abbigail Marie Elger Md Nurul Haque

BACHELOR OF SCIENCE DEGREE CANDIDATES

Applied and Computational Mathematics

Brett Jerome Flerchinger **

Atmospheric and Environmental Sciences

Lillian Joy Knudtson *
Madisen Anne Lindholm
Cory Alex Schultz **

Biology

Ashlyn A. Kaul Joshua Clinton Zerbel

Biomedical Engineering

Ava Lynn Ptak

Business Management in Technology

Kolton Jeremy Frugoli Mason R. Goeken Scott A. Sellers

Chemical Engineering

Sydney Noel Crites Henry William Fritzler Spencer Jason Mekalson Shelby Jade Solem

Chemistry

Shelby Jade Solem

Civil Engineering

Alexander Floyd Colgan Matthew James Dooley Casey James Knutsen Logan Marcus Tunnissen

Computer Engineering

Sofia Sadun

Computer Science

Haakon Anderson
Mathew Martin Clutter ***
 Daniel Scott Hunter
 Patrick James Kellar **
Benjamin Bush Millhouse
 Riley Deen Nupen *
 Brian Jason Pfeifle

Electrical Engineering

Joseph Jennings *
Chase Kristofer Reinertson
William Joseph Taylor

Geological Engineering

Skylar Massman *
Tanner James Williams

Industrial Engineering and Engineering Management

Trevor Adrian **

Morgan Catherine Else

Logan Godwin
Victor Gerardo Hernandez Chinos

Cole Christopher Jesch
Jordan Thomas Kludt

Chloe Marie Ryan
Jaclyn D. Songstad

Mathematics

Riley Deen Nupen *

Mechanical Engineering

Christopher Warren Poches Seth M. Taylor **

Metallurgical Engineering

Benjamin Elwyn Custer **
Cody Claymore Marshall
David M. Miller
Jesse Motsenbocker
Cassidy Ramona Sjovall ***

Mining Engineering

Barkwinde Ezechiel Bamogo Zachariah Briggs William Watson Carroll Jordan William Perry Zachary Theodore Thooft *

Physics

Alex J. Heindel **

Pre-Professional Health Sciences

Glory Ann Christianson Samuel Walker Torbert ***

ASSOCIATE OF ARTS DEGREE CANDIDATES

General Studies

Korena Kim Edmonds Colby Schaff

THE TRADITION OF COMMENCEMENT

Dating back to the universities of thirteenth-century Europe, the conferring of degrees signified that faculty members had attained the guild status of a master. Originally, this "master's" degree was the only one offered; the baccalaureate was simply a stage towards mastership. During the ceremony, black robes were worn in imitation of the clergy, for at the time church and university were one. When the hood was placed over the candidate's head, the ceremony was consummated and mastership was achieved.

Over the centuries, graduation evolved to commemorate more than the end of an educational endeavor or the mastership of a craft. It became the start of a new adventure, a passage to professional status recognized by the community of scholars and the community at large.

Today, we call this ceremony commencement, a term defined as both an act of commencing and the ceremony for conferring degrees. In essence, it means a beginning within an end. A middle English term, commencement traces its roots to Anglo-French, Old French, and finally, the Latin word, *cominitiare*, a combination of the prefix *com* and *initiare*, meaning "together, begin," a fitting origin for a word that evokes a graduate's first steps taken in fellowship and a poignant reminder that in each destination lies a new dawn.

ACADEMIC ATTIRE

The use of academic dress stems from costumes used in universities of the fourteenth and fifteenth centuries, particularly at Oxford and Cambridge in England. The dress has been used in the United States since colonial times and was standardized by an Intercollegiate Code in 1895.

The style of gown and hood designate the degree earned. The bachelor's gown is royal blue without a hood and the sleeves are pointed; the master's gown is black and has oblong sleeves; and the doctoral gown is trimmed with velvet, has three distinctive chevrons on each arm, and bell-shaped sleeves.

The two colors on the inside of the hood are traditionally the colors of the college granting the degree. The School of Mines colors are blue and gold; however, the hood for the School of Mines is gold and silver, symbolic of the university's connection to these precious metals. Caps are black mortar boards with the tassel worn over the left front quadrant.

As one may observe from the procession, the faculty wear hoods and gowns of varying styles and colors. The color of the tassel on the hat and the outside velvet trim of the hood indicate the field of study.

THE CEREMONIAL MACE

During today's ceremony, the chair of the faculty will carry the South Dakota School of Mines & Technology's ceremonial mace. The university mace is an academic tradition that dates back to medieval times. The mace has acquired the ceremonial function of "guarding" the president in the tradition of a medieval sergeant-at-arms.

The School of Mines mace was designed to represent the university's many disciplines. The handle was crafted from a fossil and represents paleontology, while the pink quartz sphere, encased in the symbol of an atom, symbolizes both geology and physics. The silver and gold signify the institution's rich mining tradition. The laurel leaf garland crown, fashioned from Black Hills Gold, represents a mark of honor, distinction, and success.

The mace was designed by Ms. Deborah Mitchell, former director of the Apex Gallery and associate professor in the Department of Humanities. The seal was engraved by Dr. Ryan Koontz, integrated manufacturing specialist for the Center of Excellence for Advanced Multidisciplinary Projects.

COMMENCEMENT COMMITTEE

Dr. Haley Armstrong, co-chair
Ms. Ann Brentlinger
Dr. Saurabh Dhiman
Dr. Joseph Dlugos
Ms. Diana Eastman
Ms. Gina Fiorello
Dr. Jade Herman, co-chair

Ms. Rachel Howard
Mr. Marlin Kinzer
Ms. Eliza McCallum
LTC Max Rovzar
Mr. Bryan Schumacher
Ms. Cicily Strong Hughes
Mr. Calvin Tohm

SOUTH DAKOTA BOARD OF REGENTS

Mr. Tim Rave, President
Mr. Jeff Partridge, Vice President
Mr. Douglas Morrison, Secretary
Mr. Nathan Lukkes, Executive Director
Mr. Brock Brown

Ms. Judy Dittman Mr. Randy Frederick Mr. James Lochner Mr. Randy Rasmussen Ms. Pam Roberts

PHOTOGRAPHY SERVICES

The Grad Team will be providing photography services to the graduates. Photos will be available online at TheGradTeam.com/events approximately one week after the ceremony.

