

One Hundred Ninetieth Commencement

Saturday, December Twenty-First Two Thousand and Twenty-Four The Monument Theatre

ORDER OF CEREMONY

Master of Ceremonies	Dr. Jim Stone
Processional (Stand)	Mines String Theory
<i>Pomp and Circumstance</i> by Elgar <i>Rondeau</i> by Mouret	
Presentation of Colors	Army ROTC Color Guard
President's Message	Dr. Lance Roberts
Senior Class Representative's Message	Ms. Claire Peasley
Message from the Board of Regents	Mr. Jeff Partridge
Presentation of Honorary Degrees	Dr. Lance Roberts
Commencement Address	Rep. Dusty Johnson
Conferral of Degrees	Dr. Lance Roberts
Presentation of Degree Candidates	Dr. Joseph Dlugos
Alumni Welcome	Mr. Ken Miller
Retirement of Colors	Army ROTC Color Guard
Recessional (Stand)	Mines String Theory
Les Defensionen de la state de l	

La Rejouissance by Handel

SOUTH DAKOTA MINES STRING THEORY

Tammy Schnittgrund, Director Jack Bain, Violin Rylend Brunick, Cello Kory Engelstad, Violin Sawyer Flynn, Bass Andrew Garcia, Violin

Jorden Kalbach, Violin Emily Koble, Viola Isaac Lang, Cello Grant Lewis, Violin Bennet Outland, Viola Molly Smith, Viola

This program is not an official document. Due to strict requirements, it must be printed before the final list of degree candidates can be determined.

SENIOR CLASS REPRESENTATIVE

Claire Peasley

Claire Peasley came to South Dakota Mines from Wheatland, WY, where she was homeschooled. Her parents are Steve and Melissa Peasley, and she has five siblings: Pierce, Lane, Trigg, Eve, and Brock.

Peasley has been involved in various clubs and activities while at South Dakota Mines. She has served on the Campus Ventures Servant Leadership Team since August 2020 and as a campus resident advisor since August 2021. She participated in the university's 2023 Leadership Summit and was named to the homecoming court in September 2023. She has worked as a certified nursing aide at the Platte County Legacy Home and completed civil engineering internships in Rapid City with Mead & Hunt in summer 2023 and Advanced Design Engineering & Surveying in summer 2024.

After graduating from Mines with her bachelor's degree in civil engineering, Peasley plans to join Interstate Engineering in Spearfish as a staff engineer.

HONORARY DOCTOR OF PUBLIC SERVICE

Jeane Hull

Jeane Hull graduated from South Dakota Mines in 1977 with a bachelor's degree in civil engineering and obtained an MBA from Nova Southeastern University. She spent the bulk of her career in the mining industry. She retired in 2015 from Peabody Energy, where she was the executive vice president and chief technical officer responsible for global engineering services and supply chain management activities as well as technical, projects, and operations support functions for Peabody's US and international platforms.

Before joining Peabody, Hull was the chief operating officer for Kennecott Utah Copper, a subsidiary of mining and metals giant Rio Tinto. It was during this time that she became the general manager of Spring Creek Coal, making her the first female manager of a coal mine in the US. Prior to joining Rio Tinto, she spent 12 years with Mobil Mining and Minerals and Mobil Chemical Company. She has additional engineering, environmental and regulatory affairs experience in the public and private sector, and currently works as an independent director for Wheaton Precious Metals, Coeur Mining, Hudbay Minerals, and Epiroc.

Hull has been active with South Dakota Mines for many years. She was a long-time member of the University Advisory Board, served on the board for the Center of Alumni Relations and Advancement (formerly the Foundation), has been a volunteer lecturer in the Department of Mining Engineering and Management for the past four years, and has been a mentor for the Entrepreneur in Residence program. She and her husband John (Min E 77) support a variety of scholarships and programs, including the Hull Mining Engineering Professorship and two scholarships that support basketball and golf student athletes. They helped start the Next Gen challenge that raised significant donations for the Nucor Mineral Industries Building. Hull loves spending time with family, golfing and fishing.

Hull says that Mines gave her two precious gifts for which she is eternally grateful. The first and foremost gift was her husband, whom she met at Mines. The second gift was the educational foundation, skills and experiences that helped launch a very fulfilling career.

COMMENCEMENT ADDRESS

U.S. Representative Dusty Johnson

Dusty Johnson brings an energetic and optimistic style to Washington as South Dakota's lone voice in the U.S. House of Representatives. A recognized leader in issues related to rural America, agriculture, and welfare reform, he serves on the Agriculture Committee and as Chairman of the Commodity Markets, Digital Assets, and Rural Development Subcommittee. As a member of the Transportation & Infrastructure Committee, Dusty has been focused on finding solutions to the supply chain crisis through his Ocean Shipping Reform Act which passed the House in 2021.

Prior to being elected to Congress, he served as chief of staff to the governor and as vice president of Vantage Point Solutions, a South Dakota-based engineering and consulting firm specializing in rural telecommunications. Dusty grew up in central South Dakota and holds degrees from the University of South Dakota and the University of Kansas. An active community volunteer, he has served as a Sunday School teacher, adjunct faculty member at Dakota Wesleyan University, and president and board member of Abbott House, an agency serving abused and neglected children. He lives in Mitchell with his wife and three sons.

GRADUATE DESIGNATIONS

† Summer 2024 Graduate

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

Civil and Environmental Engineering Ramesh Devadig †

Dissertation Title: Rationally Designed Nanoscale Graphene Coatings on Nickel Substrates for Corrosion and Fouling Applications

Abu Naser Rashid Reza †

Dissertation Title: Early-Age Reaction Mechanisms and Phase Quantification of Alkali-Activated Geopolymers

Jetsun Leonhardt Ty Thinley †

Dissertation Title: The Mechanical, Reactivity, and Durability Performance of Beneficiated and Unconventional Source Coal Ash

Data Science and Engineering

Brian Christopher Fehrman

Dissertation Title: Establishing the Foundations for Developing a Tissue Engineered Vascular Graft

Materials Engineering and Science

Venkata Anantha Shayanam Kandadai

Dissertation Title: Microstructure, Mechanical, Corrosion and Optical Properties of Pulsed Laser deposited Boron Nitride Nanofilms

Nanoscience and Nanoengineering Yoseph Michealey Loyd †

Dissertation Title: The Development of Computational Tools for Lattice Light Sheet Microscopy for the Membrane Dynamics of Endocytic Events

Obiora Godwin Onyilagha †

Dissertation Title: Effect of Mechanical Property on the Sensitivity and Detection Range of Wearable Strain and Pressure Sensors

Physics

Jack Garrett Genovesi † Dissertation Title: Search for Time Dependent Dark Matter Signals with the LUX-ZEPLIN (LZ) Experiment

Bhubnesh Lama

Dissertation Title: Electronic Properties of Oxides Interfaces and Electrochemical Properties of Battery Materials Using Density Functional Theory

DOCTOR OF PHILOSOPHY DEGREE CANDIDATES

Biomedical Engineering

Laura Anna Elizabeth Brunmaier Dissertation Title: Establishing the Foundations for Developing a Tissue Engineered Vascular Graft

MASTER OF SCIENCE DEGREE CANDIDATES

Biomedical Engineering

Zachary Thomas Bender

Chemical Engineering

Michael Cullen Hickey Trigg Scott Peasley

Civil and Environmental Engineering

Alexander Floyd Colgan Matthew James Dooley Md Mahjib Hossain Shane Allen Matt Blake Robert Messegee Ruth Mackenzie Potter Jill Yi Rotherham † Aritree Modak Shreya Franc Ghislain Yatchoutcham Pettang

Computer Science and Engineering

Christian Duane Olson

Construction Engineering and Management

John Mikhail de los Reyes Jamie Paul Higgins † Nour Yasser Safa Chaz Lyle Spellman

Electrical Engineering

Asif Mohammad Mithu

Engineering Management

Brooks Bowthorpe Rebecca Licayan Cychosz Morgan Elizabeth Thompson Sreedharan Vembadi Connor Robert Weber

Materials Engineering and Science

Trent Alexander Klocek Liam Andrew Stack † Sathwik Tirukandyur †

Mechanical Engineering

Kyden Fraser DeGross Asher Caleb Eskam Md Wahidul Hasan Austin Ray Kaul Elijah Lee Meakins † Md Gulam Smdani Casey Paul Strong Thomas John Trautman

Mining Engineering and Management

Sharon Elizabeth Arrieta Ruiz † Chance Reynolds Fuller † Jackson Stewart May Yaa Ntobea Osae

Paleontology

Logan Thomas McCutcheon Gabrielle Nicolette Olive

Physics

Khimananda Acharya †

BACHELOR OF SCIENCE DEGREE CANDIDATES

Applied Biological Sciences Grant Jonathan Brewer

Atmospheric and Environmental Sciences

Isaac Peter Kolousek

Biology

Aisling A. Hall *** Madison J. Janzen * Cameron Joseph Smejkal * Kellen Elizabeth Thomas **

Biomedical Engineering

Alexander Tyrone Hentschel ** Delenn Xin Mobley Isabel Joleen Nielson Sydney Lucinda Sanders Gavin S. Tucker **

Business Management in Technology

Piper Ann Bauer Elrey Brooks Kaleb Tischler ** William Ian Vertrees

Chemical Engineering

Trey F. Aldrich Pearson Michael Brown Alexander Mykal Mika Sofia Nicolle Ponce Molina Trent Michael Ripley Ethan Lloyd Rogers * Julia Diane Sabetti Cory Stone *

Chemistry

Ethan Lloyd Rogers *

Civil Engineering

Carter John Amland *** Grant Jonathan Brewer Amanda Brooke Cooley Aydon L. Ellis Max Arthur Hoatson Justin Christopher Houlette James Ray Lichtenberg Joshua James Martens Clay M. Olson Ryan Emerson Paswaters Claire Mae Peasley Nolan J. Rader ** Evan C. Spraker

Computer Science

Homer Jack Foutz Hayden Rudy Jaramillo * Samantha Kaltved ** Mary Ann Moore Drew Trygve Norby Oliver M. Schwab Ryan Anthony Sime

Electrical Engineering

Hailey Mackenzie Sund

Industrial Engineering and Engineering Management

Davis George Camp Nicholas Alexander Davey Isabel Mary Vivian Larsen Andrew Edward Peterson Bryce T. Sherrell Holden Wallace Wagner Orlando Jovan Westbrook

Mathematics

Jada Orion Bell * Danniele Brynn Lueder * Olivia Frances Stelzer Chloe Ann Toward Tanner Joseph Ziwicki

Mechanical Engineering

Chase M. Oien Annaliese Elizabeth Wollman ** Landon Thomas Zentz *

Metallurgical Engineering Mason A. Lane

Thad B. Saylor

Physics Finnian Christopher Rogers ***

Pre-Professional Health Sciences Anna Noelle Fitzgerald **

Science, Technology, and Society

Dakota Quinn Crocker Kyle Harris Margaret May O'Connor

ASSOCIATE OF ARTS DEGREE CANDIDATES

General Studies

John Gabriel Herweh

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 indicates 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 CAMP.

COMMENCEMENT COMMITTEE

- Dr. Haley Armstrong, co-chair Dr. Saurabh Dhiman Dr. Joseph Dlugos Ms. Diana Eastman Ms. Gina Fiorello LTC Kristopher J. Gardner
- Dr. Jade Herman, co-chair Ms. Rachel Howard Mr. Marlin Kinzer Mr. Bryan Schumacher Ms. Rachel Skea

SOUTH DAKOTA BOARD OF REGENTS

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