192nd COMMENCEMENT

SATURDAY, DECEMBER 20TH, 2025
9:00 A.M.
THE MONUMENT THEATRE

PRESIDENT'S MESSAGE

DR. BRIAN TANDE

To the Class of 2025:

Congratulations on reaching this extraordinary milestone! Today marks the culmination of years of hard work and determination. As you walk across the stage, you join a legacy of South Dakota Mines alumni who have gone on to lead, innovate, and make a meaningful difference in the world.

I am so proud of all of you and privileged to celebrate commencement with you. Your journeys reflect the very best of what it means to be a Hardrocker. You've faced challenges head-on, formed lifelong friendships, and achieved something truly remarkable.

As your names are cemented in their rightful spot on M Hill, remember that you will always have a place here. Mines is more than a university—it's a community that will continue to support you, celebrate you, and cheer you on as you take on the next chapter.

Thank you for the passion, curiosity, and energy you've brought to our campus. I can't wait to see what you accomplish next.

With pride and warmest congratulations,

Brian Tande, PhD
President

OUR HISTORY

Founded in 1885—four years before South Dakota achieved statehood—South Dakota Mines has been at the forefront of science, engineering, and innovation for nearly 140 years. What began as the Dakota School of Mines quickly became a cornerstone for technical education in the Black Hills region. The first class was held in 1887, and the institution was soon renamed the South Dakota School of Mines following statehood in 1889. The first graduating class, consisting of Benjamin Poznansky, Caroline Feigel, and Eva Robinson, received bachelor of science degrees on May 29, 1890.

Mines is home to some of South Dakota's most cherished traditions, including M Day, first celebrated in 1912 with the construction of the iconic "M" on M Hill. Over the decades, the university grew in both size and reputation, adding new programs and facilities to meet the evolving needs of science and engineering education; in 1943, the state legislature officially added "and Technology" to the university's name to signify this growth. During both World Wars, Mines supported the nation by training soldiers on campus, and the post-war period saw major expansions in academic offerings, research, and infrastructure.

Throughout the 20th and 21st centuries, Mines has continued to lead in STEM fields and continued to expand research funding, industry partnerships, and student achievements. Today, South Dakota Mines is recognized as a leader in engineering and science education, known for producing hardworking, innovative graduates who are ready to tackle the world's most pressing challenges. It's also consistently ranked as one of the best returns on investment for college graduates nationwide. With each graduating class, the legacy of Mines continues to grow, etched into M Hill and carried forward by generations of proud Hardrockers.

ORDER OF CEREMONY

Master of Ceremonies
Dr. Lance Roberts

Processional (Stand)
Pomp and Circumstance by Edward Elgar
Rondeau by Mouret
Commencement Orchestra

Presentation of Colors
Army ROTC Color Guard

President's Message
Dr. Brian Tande

Recognition of the 50 Year Graduates
Dr. Lance Roberts

Senior Class Representative's Message
Mr. Adedokum Alarape-Crowe

Commencement Address
Dr. Scyller Borglum

Message from the Board of Regents
Mr. Griffin Petersen

Conferral of Degrees
Dr. Brian Tande

Presentation of Degree Candidates
Dr. Joseph Dlugos

Alumni Welcome
Dr. Michael Koch

Retirement of Colors
Army ROTC Color Guard

Recessional (Stand)
La Rejouissance by Handel
Commencement Orchestra

SENIOR CLASS REPRESENTATIVE

Adedokum Alarape-Crowe

Adedokum Alarape-Crowe came to South Dakota Mines from Hudson, Colorado, after graduating from Weld Central High School. His parents are Karen Crowe and Adebayo Alarape, and he has one brother, Adekunle Alarape-Crowe.

During his time on campus, Alarape-Crowe has been involved in the National Society of Black Engineers and the Student Association Senate. He played as a defensive back on the Hardrockers football team since 2022, earning 2023 and 2024 RMAC All-Academic Honor Roll selections.

Outside of the school, Alarape-Crowe worked for Interstates in Sioux Center, Iowa, as an assistant project manager during the summer of 2023; Nucor-Vulcraft in Florence, South Carolina, as a design engineer during the summer of 2024; and as a geotechnical engineer at Advanced Geotechnical Solutions, Inc. in Casper, Wyoming, during the summer of 2025.

After graduating with his Bachelor of Science degree in civil engineering, Alarape-Crowe will pursue a master's degree in civil engineering from Mines.

KEYNOTE SPEAKER

Dr. Scyller Borglum

Dr. Scyller Borglum brings more than 20 years of experience in petroleum and geological engineering, energy storage technologies, and strategic leadership. She currently serves as the Head of Caverns and Salt-Brine Expert at Westlake Corporation, providing technical oversight and strategic planning for solution mining, brine disposal, and cavern integrity across North American manufacturing sites. Her responsibilities include managing brine field operations, salt dome geology, and underground storage caverns.

Previously, Dr. Borglum led WSP USA's Underground Storage Market within the Energy National Business Line, where she oversaw salt cavern development for temporary gas storage and served as deputy project manager for the cavern development portion of ACES (Advanced Clean Energy Storage) in Delta, Utah—the world's first utility-scale hydrogen production and storage facility. Her expertise spans hydrogen storage, carbon dioxide sequestration, natural gas and LPG storage, and compressed air energy storage.

Dr. Borglum's career includes hands-on fieldwork across the Rocky Mountain front, Texas, and North Dakota, as well as engineering roles at RESPEC and Marathon Oil. She has conducted extensive geomechanical studies on salt and rock types and served as an Oak Ridge Institute of Science and Education Fellow at the National Energy Technology Laboratory. As a Fulbright scholar, she lived in Oslo, Norway, studying sustainable development through the venue of international business with a research group at the University of Oslo. In addition to her technical work, Dr. Borglum served as an elected representative in the South Dakota State Legislature, where she shaped energy policy on renewable development and decommissioning.

She earned a Ph.D. in geology & geological engineering from South Dakota Mines in 2018. She also holds two master's degrees (petroleum engineering and theological studies) and dual bachelor's degrees in petroleum engineering and international business. Dr. Borglum is a published author of two books—*The Fossil Fuel Revolution: Shale Gas and Tight Oil* (2018) and *STEM Study Habits* (2024)—and numerous technical papers. She frequently speaks at international conferences on energy and storage technologies.

Dr. Borglum resides with her husband in Rapid City, and travels frequently to Houston, Texas, for work.

GRADUATE DESIGNATIONS

†Army ROTC Cadet being commissioned as Second Lieutenant

† August 2025 Graduate

‡ December 2024 Graduate

‡‡ August 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

DOCTOR OF PHILOSOPHY DEGREE CANDIDATES

ATMOSPHERIC & ENVIRONMENTAL SCIENCE

John Bradley Eyelander†
Dissertation Title: *Assimilation of Geostationary Satellite Land Surface Temperature Measurements into the Noah and Noah Multi-parameterization models using the NASA Land Information System*

BIOMEDICAL ENGINEERING

Jason Paulovich
Dissertation Title: *Comparing Knee Joint Contact Forces and Impulses During Lower-body Exercise Movements to Better Understand Osteoarthritis Prevention and Rehabilitation*

CHEMICAL & BIOLOGICAL ENGINEERING

Khang Trong Huynh
Dissertation Title: *Novel Porous Carbon and Ferrite Electrode Materials for Energy Storage*

Md. Hasan-Ur Rahman†
Dissertation Title: *Intelligent Characterization Systems for Infrastructure Applications: From 2D Materials Quality Control to Biofilm*

MECHANICAL ENGINEERING

Md Wahidul Hasan†
Dissertation Title: *A Synergistic Strategy for the Development of Advanced, Scalable Lithium-Sulfur Batteries*

Terrence Scott Kuca
Dissertation Title: *Aerodynamic Method & Design for Laboratory Dustiness Testing*

MECHANICAL ENGINEERING

Mingyang Mao
Dissertation Title: *Development of a Tissue Engineered Synovial Membrane Utilizing Hyaluronan Binding Peptides and Its Diagnostic Applications*

MASTER OF SCIENCE DEGREE CANDIDATES

BIOMEDICAL ENGINEERING

Aaron James Bauer

CHEMICAL & BIOLOGICAL SCIENCES

Alissa Cerise Love

CHEMICAL ENGINEERING

Wageesha Sharma†
Md. Woashib Shikder
Shelby Jade Solem
Jose Jene Stevens

CIVIL & ENVIRONMENTAL ENGINEERING

Justin Christopher Houlette
Brynne Margaret Wright

COMPUTER SCIENCE & ENGINEERING

Samantha Brooke Divis

CONSTRUCTION ENGINEERING & MANAGEMENT

Alexandra Alvarado
Vladislav Barshinov
Josue Olabode Biya
Michael Eric Broda, Jr.
Kevin Bruxvoort
Cathya Hilton
Kouassi Michel Nguessan†
Esther Susa
Mark Theisinger
Jesiah Joseph Wight

ELECTRICAL ENGINEERING

Emmanuel Akukula Attarbo
Tate Walker Dille
Chayce Hunter Grindle

ENGNEERING MANAGEMENT

Rylie Nicole Andrews
Corinne Marie Heiberger†
Jenna Dea Sayler†
Jordyn Marie Tygesen
Luke Allen Wickersham

GEOLOGY & GEOLOGICAL ENGINEERING

Samuel J. Herrboldt
Shams Jerin Khan Sharna
Nicklaus Alexander Wiswedel

MATERIALS ENGINEERING & SCIENCE

Hindu Vardhan Ramineni†
Bridget Yvette Ricks
Aaron Daniel White†

MECHANICAL ENGINEERING

Farhana Nasrin Akter
Jaden S. Arner
Trinity James Lindner

MINING ENGINEERING & MANAGEMENT

Stephen Boakye Yiadom†
Jason Scott Connot
Gilbert Etiako Djanetey
Baah Bossman Effah
Srikanth Janga
Godwin Etor Komla Kpedzroku
Joshua Whajah

NANOSCIENCE & NANOENGINEERING

Palash Kumar Saha

PALEONTOLOGY

Nicole Leah Anderson
Morgan Elizabeth Nystuen

PHYSICS

Himal Oli


SCHOOL OF MINES AND TECHNOLOGY
ENGINEERING
TECHNOLOGY
1885
SCIENCE
SOUTH DAKOTA

BACHELOR OF SCIENCE DEGREE CANDIDATES

ATMOSPHERIC & ENVIRONMENTAL SCIENCES

Joshua Aaron Rowe

BIOLOGY

Annaliese Marie Braucht-Huot ***
Madysen Dawn Fines

BIOMEDICAL ENGINEERING

Annaliese Marie Braucht-Huot ***
Caleb J. Franklin
Kelsea Grace Hyde

BUSINESS MANAGEMENT IN TECHNOLOGY

Michael Eric Broda Jr.
Isaac Thomas Freitag
Jack S. Masters
Marissa Taylor Simpleman
Jake A. Ulberg

CHEMICAL ENGINEERING

Connor Jonathan Arens ***
Thomas William Entgelmeier
Alexander James Gallagher *
Sam Hartway
Alexis Klemke

CIVIL ENGINEERING

Adedokum A. Alarape-Crowe
Cayden T. Benson
Trevor Devitt
Clare M. Fischer ***
Nya L. Halley ***
Sierra Hill
Sydnee Christine Holmes
Alyvia Victoria Krueger
Samantha Alana Twing
Elijah Douglas Upton
Nathan J. Waters
Taegen J. Wells
Lennon Orion Zeller

COMPUTER ENGINEERING

Elizabeth Anne Herting **
Kenton Kowar
Jackson Lee Kull
Jesus Daniel Mendez Galvan
Mason Phillip Myers
Brayden Thomas Schlachter
Nicholas Kraig Wilk

ELECTRICAL ENGINEERING

Tanner Jordon LeSage
Alexander Oltman
Jonathan M. Stockwell

INDUSTRIAL ENGINEERING & ENGINEERING MANAGEMENT

Seth D. Decker
Sawyer Shay Flynn
Austin Scott Gregor
Jacob Allen Huhn
Caleb Bruce Huxford
Christopher Lazear
Henry J. Roels

MATHEMATICS

Brennan Logan Scarpello

MECHANICAL ENGINEERING

Hagan Thurman Archer
Zachary Robert Bedard
Kelvin D. Nieman
Alec Jay Page
Sean Wacker ***

METALLURGICAL ENGINEERING

Daniel James Ashford
Daniel Kimball
Austin Curtis Marr
David J. Pienta
Tristan William Thompson

MINING ENGINEERING

Colin Q. Doty
Mason Samuel Galbreath
Rachida Bakoum Nahidad Kouanda
Gloria Geraldine Miranda Apaza
Bayler Q. Sterkel

PHYSICS

Caleb Lane Allen *
Caleb Isaac Henderson ***

PRE-PROFESSIONAL HEALTH SCIENCES

Kailyn Grace Carlson *
Cody Thomas Connor **
Tatum Evelyn Hanson
Luke Robert Higgins
Taylor J. Moran ***

COMMENCEMENT COMMITTEE

Dr. Haley Armstrong, Co-chair
Dr. Jade Herman, Co-chair
Ms. Jennifer Bauer
Dr. Joseph Dlugos
Ms. Diana Eastman
Mr. Dane Finnesand
Ms. Gina Fiorello
Ms. Rachel Howard
Ms. Rachel Skea
Mr. Chase Stohlmann
Mr. Jacob Vostad

SOUTH DAKOTA BOARD OF REGENTS

Mr. Tim Rave, President
Mr. Jeff Partridge, Vice President
Mr. Randy Frederick, Secretary
Mr. Nathan Lukkes, Executive Director
Mr. Miles Beacom
Dr. Judy Dittman
Mr. James Lochner
Mr. Griffin Petersen
Mr. Randy Rasmussen
Ms. Pam Roberts

SOUTH DAKOTA MINES COMMENCEMENT ORCHESTRA

Tammy Schnittgrund, Director
Grace Belcher, Cello
Christopher Budd, Viola
Lilly Woodruff, Violin

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.

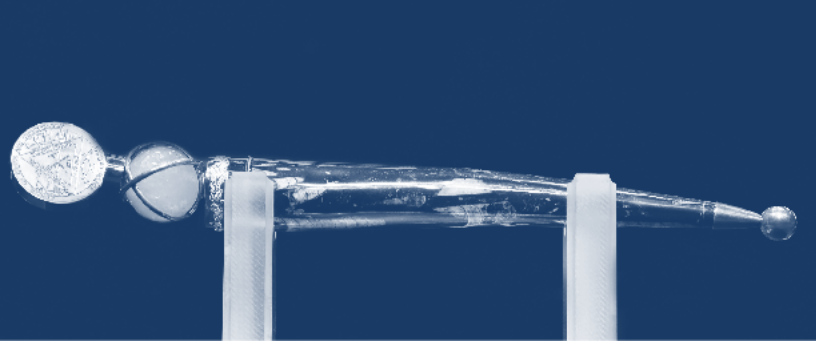
ACADEMIC ATTIRE

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 university 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, an integrated manufacturing specialist for CAMP.

ALUMNI PINS

On behalf of South Dakota Mines Center for Alumni Relations and Advancement, each graduate is gifted with an alumni pin, presented by Honorary Alumni President Dr. Michael Koch. The pin serves as a reminder that once a Hardrocker, always a Hardrocker and the hope is graduates will wear it proudly as they go forth in their careers.

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.

CUSTOM GRADUATION VIDEO

Celebrate with your free graduation gift. Download your StageClip personalized graduation video, featuring just your special moment on stage. Find your clip after graduation at sdsmt.stageclip.com.

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.

SOUTH DAKOTA MINES®

An engineering, science and technology university