

# NEW MEXICO TECH

## COMMENCEMENT

SATURDAY, MAY 11, 2024



CLASS OF 2024

# THE FUTURE IS YOURS

Stay connected and watch your  
classmates grow, thrive, & flourish!

Starting May 17, scan QR code to  
download commencement photos.



Use this hashtag to share your photos  
on Instagram, Facebook, & LinkedIn:

**#NMTGrad2024**

*M*



@NewMexicoTech

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Governor

# PRESIDENT, VICE PRESIDENTS, & DEANS

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Faculty Senate Chair

Jennifer Chapman  
Dean of Students

Elaine DeBrine-Howell  
Dean of Student Success  
Initiatives

# PROCESSIONAL

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## Welcome and Address

Dr. Mahyar Amouzegar, President

## Distinguished Teaching Award

The Distinguished Teaching Award is presented each year to a faculty member based on recommendations and nominations from students, alumni, and other faculty. The winner receives a plaque and a \$2,500 cash award.

## Student Speaker

Brianna Detsoi, Class of 2024

## Langmuir Award

The Langmuir Award for Excellence in Research is given for an outstanding scientific research paper by any student or graduate of New Mexico Tech. The paper must have been submitted to or published by a recognized journal during the preceding year. The recipient is selected by the Faculty Senate's Honorary Degrees and Awards Committee. The award is named in honor of Irving Langmuir (Nobel Laureate, chemistry, 1932) who conducted extensive research with Tech staff. The award consists of a plaque and a \$400 cash award.

## Founders' Award

The Founders' Award was created to honor the persons responsible for establishing the New Mexico School of Mines in Socorro in 1889, especially J.J. Baca and Ethan Eaton. The award is presented to the recipient of an advanced degree who has made an outstanding contribution to Tech through scholarship, research, and involvement in campus affairs. The recipient is chosen by faculty nomination and Faculty Senate election. The award consists of a plaque and an \$800 cash award.

## Cramer Awards

These awards were established to honor Tom Cramer, an engineer and a member of the Tech Board of Regents for 26 years. These awards are given to the top two graduating seniors in engineering who rank highest in scholarship. The awards consist of a citation and a \$400 cash award. The recipients are chosen by the Faculty Senate upon recommendation of the engineering faculty.

## Brown Award

The Brown Award is named in honor of Mr. C.T. Brown, a mining executive and great benefactor of NMT and of Socorro who served on the Tech Board of Regents from 1898 to 1914 and from 1917 to 1922. It is presented to the member of the graduating class who, in the opinion of the faculty, ranks highest in scholarship, conduct, and leadership. The award consists of a plaque and a prize of \$1,000.

# PRESENTATION OF DEGREES

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## Undergraduates

Dr. Matthew Johnson, Assistant Professor of Spanish and Hispanic Studies

## Graduates

Dr. Aly El-Osery, Dean of Graduate Studies, Professor of Electrical Engineering

## Recessional

Dr. Mahyar Amouzegar, President

## AFTER THE CEREMONY

New Mexico Tech was founded in 1889, and you join an illustrious group of alumni in science, technology, engineering, mathematics, and beyond.

We are delighted to invite you to the graduation reception, which will take place on the beautiful New Mexico Tech campus after the commencement ceremony.

This momentous event marks the culmination of your academic journey and is a time to celebrate your achievements with your family and friends. We encourage you to take the time to reflect on your accomplishments and enjoy the beautiful surroundings with your loved ones.

This is a wonderful opportunity to capture photographs that will serve as cherished memories of your time at New Mexico Tech.

# COMMENCEMENT STUDENT SPEAKER

## BRIANNA DETSOI

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Brianna Detsoi, a familiar face on campus, is a Diné student from Bloomfield, New Mexico, and is receiving a Bachelor's in Chemistry today. Brianna is a first-generation college student and the first of her siblings to graduate from college. She is also the first Native American student to be named the Commencement Student Speaker at New Mexico Tech.

Brianna is of the Folded Arms clan, born into the Waters Coming Together clan. Her maternal grandfather is of the Mexican People clan and her paternal grandfather is of the Edgewater clan.

Brianna describes herself as energetic and enthusiastic, and is passionate about her research. In addition to excelling in chemistry, mathematics, physics, and biology, she has been a tutor for student success at San Juan College; an instructor and dorm parent for summer courses at Cushing Academy in Massachusetts; and a volunteer at an animal shelter in Farmington.

She earned an associate of science degree in chemistry in 2020 from San Juan College in Farmington, New Mexico. There, she served as a student representative for the Society for the Advancement of Chicanos/Latinos and Native Americans in Science. At both San Juan and New Mexico Tech, Brianna served as chapter president of the American Indian Science and Engineering Society.

After transferring to New Mexico Tech, Brianna held two summer internships at the New Mexico IDeA Networks of Biomedical Research Excellence, housed at New Mexico State University. Brianna is also a recipient of the Bright Star Scholar Program internship from the Bureau of Geology and Mineral Resources as well as a merit-based Cobell Scholarship for Native college students.

She will pursue a Ph.D. in inorganic chemistry at New Mexico State University in the fall.



# DISTINGUISHED TEACHING AWARD

## DR. DAVID MEIER, PHYSICS

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Dr. David Meier is an Associate Professor who teaches courses throughout the undergraduate and graduate physics curriculum, including those on Astronomy and Astrophysics. His prolific scholarship focuses on the evolution of star formation and its natal fuel across galaxies and has multiple collaborations, including colleagues at the National Radio Astronomy Observatory. He joined the NMT faculty in 2008.

Twelve individuals nominated Dr. Meier for this award and they highlighted his dedication, compassion, and quirky sense of humor. The feedback on the level of instruction received from students this year impressed the committee; students emphasized his availability, his ability to engage and inspire them, and his willingness to assist and help them succeed.



As one of his students summarized: “he makes confusing subjects such as special relativity and the quantum mechanics of atoms somehow understandable.” Another said, “He makes class exciting and interesting, and I often leave lectures asking more questions than I begin with.” Dr. Meier, observed an additional student, “does an excellent job of staying ‘in tune’ with the class and really prioritizes maximizing our learning.”

“It is a great honor to receive this award,” said Dr. Meier. “Teaching is such a vital and rewarding part of being a professor. It is wonderful to have the hard work and dedication recognized. All the credit goes to the students and the material for making it so fun to teach.”

Dr. Meier earned a B.A. in physics from California State University, Los Angeles; and an M.S. and Ph.D. in astronomy from University of California, Los Angeles.

# DEPARTMENTAL AWARDS

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## Biology Department

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### Shortess Award

Aaron Ortiz  
Cassandra Skaar

## Chemistry Department

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### Carl J. Popp Award

Victor Z Schiller

### Analytical Chemistry Award

Jackson Orr

### Organic Chemistry Award

Matthew Patchett

### Physical Chemistry Award

Jordan McMillan

### Biochemistry Award

Ella Eleven

### Graduate Research Award

Quinn Abfalterer

### Graduate Teaching Award

Jordyn Wemhoner

### Melvin J. Hatch Award

Victor Schiller

## Materials & Metallurgical Engineering Department

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### Ashman Award

BS: Annika Bauman  
MS: Md Mahmudul Hasan  
MS: ThankGod Nwokocha

### Ron Roman Award

Thomas Hands

### Charles Jarvorsky Award

Emma L Brudos  
Gabriel Beltran  
Brenna DeLowery  
Nomar Roman  
John Switzer

### Karl Staudhammer Award

Emma L Brudos

## Mineral Engineering Department

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### Old Timers Award

Mariam Koanda

## Physics Department

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### Brook Award

Logan Baeza  
Mason Earick

### Fallon Award

Andrew Douglas

### Wilkening Award

David M Bennecke

### Petschek Award

Forest T Good  
Tatiana M Rodriguez

### Physics Achievement Award

Ariana Garcia

### Caitlin Guenther MacQueen

Barbara Olivares Carvajal

## Chemical Engineering Department

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### Outstanding Student

Jaeann N Gonzales

### Student Service Award

Tucker A Burnett  
Luke A Venturina

### True Grit

Julio Cubillas Flores

## Mechanical Engineering Department

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### Outstanding Service

Lillian F DeGroot

### Outstanding Research

Chase Dunaway

### Outstanding Design Award

Leslie Flores

### Outstanding Design Clinic Team Leader

Michael Taylor

## Civil & Environmental Engineering Department

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### Paige Ashman Memorial Award

Joseph C Nickerson  
Austin L Starnes

# GRADUATING TECH SCHOLARS

A designation awarded to students who have demonstrated superior scholastic competence and conduct.

Matthew Barber  
Juliana Barstow  
Matthew Beecher  
David Bennecke  
Bhumika Bhakta  
Jainder Bhullar  
Emma Brudos  
Tucker Burnett  
DawnMonique Cantu  
Logan Caspersen  
Bishop Cervantes  
Antonio Chavez  
Sarah Crotzer  
Lillian DeGroot  
Devyn Del Curto  
Marissa DiFederico  
Gage Ellis  
Samuel Fisher  
Patrocinio Flores  
Ariana Garcia  
Forest Good  
Donovan Griego  
Jessica Gwilt

Calyssa Huff  
Nicholas Hutt  
Kaleb Jewett  
Cason Jones  
Mia Karmesin  
Mason Kasprowicz  
Preston Kite  
Mariam Koonda  
Amanda Lague  
Garrett LaLonde  
Wesley Leavitt  
Adrian Maez  
Shemariah Maher  
Adam Mirate  
Anita Montoya  
James Montoya  
Matthew Moore  
Ruthie Mulvaney  
Joseph Nickerson  
Eric Nuñez  
Jakobe Ochoa  
Aaron Ortiz  
Edgar Pallares

Aidan Parral  
Zack Parral  
Mathew Rawson  
Natalia Saiz  
Adam Salazar  
Cassandra Skaar  
Austin Starnes  
Zane Stevens  
Casie Taylor  
Alyias Thomas  
Reese Turpish  
Matthew Tyrrell  
Nathanael Umba  
Kristen Valero  
Jackson Vaughn Furr  
Jack Vickerman  
Robert Volkmann  
Jason Wiberg  
Benjamin Wilson  
Taylor Yazzie  
Robert Young  
Aubrey Zimmer

## 2024 MACEY SCHOLARS

The William B. & Jean M. Macey Scholars Program recognizes undergraduates whose accomplishments in academics, research, service, volunteerism, and other activities are exceptional and inspiring. Macey Scholars receive a financial award of \$5,000.

**Chemical  
Engineering**  
Samantha Knight

**Chemical  
Engineering**  
James Angelos

**Biomedical  
Science**  
Ruthie Mulvaney

**Biology**  
Calyssa Huff

# UNDERGRADUATE DEGREES

\* Honors  
Cumulative GPA of  
3.00 to 3.49

\*\* High Honors  
Cumulative GPA of  
3.50 to 3.74

\*\*\* Highest Honors  
Cumulative GPA of  
3.75 to 4.00

## Bachelor of General Studies

Meadow Marilla Crise\*  
Marrinna A Martinez\*  
Kristen Renee Valero\*

## Bachelor of Arts in Chemistry

Brianna Whitney Detsoi

## Bachelor of Science in Basic Sciences

Dylan M Nelson  
Nathan S Rosenberg  
*(Minor in Environmental Engineering)*

## Bachelor of Science in Biology

Calyssa Julia Huff\*\*  
Tabitha Ferne Hunter\*\*\*  
*(Minor in Biomedical Engineering)*  
Amarelis Patricia Meraz  
Aidan Michael Myerscough  
Sabine-Claire Brittney Nkolo Essomba\*  
*(Minor in Hispanic Studies)*  
Aaron Jordan Ortiz\*\*\*  
Alyssa Marie Sandusky  
Cassandra Helena Skaar\*\*\*  
Kaitlyn Faith Williams\*\*  
Benjamin Holder Wilson\*\*\*  
*(Minor in History)*

## Bachelor of Science in Biomedical Sciences with Biology Option

Olivia K Caffrey\*  
*(Minor in Hispanic Studies)*  
Sarah Michelle Crotzer\*\*\*  
Devyn L Del Curto\*\*\*

## Bachelor of Science in Biomedical Sciences with Chemistry Option

Mireya Sinai Grijalva  
Ruthie Jordan Mulvaney\*\*\*

## Bachelor of Science in Biomedical Sciences with Cognitive Neuroscience Option

Caitlin Rose Contreras\*

## Bachelor of Science in Biomedical Sciences with Psychology & Neuroscience Option

Jason Thomas Wiberg\*\*\*

## Bachelor of Science in Chemical Engineering

Tucker Austin Burnett\*\*  
Christopher Atlee Gaddis  
*(Minor in Mechanical Engineering)*  
Jaeann N Gonzales\*  
Roland Reed Lassiter\*  
John J Lempke  
Jonathan Lewis Logan  
Angelica Maestas\*  
Luke Andrew Fajutagana Venturina  
*(Minor in Computer Engineering)*

## Bachelor of Science in Chemistry with Biochemistry Option

Victor Zachariah Schiller\*

## Bachelor of Science in Civil Engineering

Isiah Jim Charles\*  
Nicholas A Hutt\*\*\*  
Shemariah Maher\*\*\*  
*(Minor in Mineral Engineering)*  
Joseph Connor Nickerson\*\*\*  
David Emilio Padilla\*  
Marukujani Freddy Puriza  
Malcolm Claymore Ross\*  
Nathanael Manara Kalangwa Umba\*\*\*

## Bachelor of Science in Computer Science

Matthew J Beecher\*\*\*  
Jainder Singh Bhullar\*  
William James Garrett\*  
Donovan Xavier Griego\*\*  
Hunter Allen Hancock\*  
Preston M Kite\*\*\*  
Simon Kopischke  
Johnathan Jose Martinez\*  
Jennifer Minnich\*  
Edgar Pallares\*\*  
Aidan Paulson Parral\*\*\*

Christopher Colin Roy\*  
Tim Santiago Salazar  
Justin D Trussell\*  
*(Minor in Computer Engineering)*  
Jackson Bennett Vaughn Furr\*  
Garrett Robert Wood

## Bachelor of Science in Earth Science

Victoria Jones\*  
*(Minor in Hydrology)*  
Sharon Belem Minnix\*

## Bachelor of Science in Electrical Engineering

Brayan Eduardo Barajas  
Marissa Faith DiFederico\*\*  
Tyler Daniel LeMoine\*  
Adrian E Maez\*\*\*  
Dragutin Maric\*  
Anita Maria Montoya\*\*  
Zack Paulson Parral \*\*\*  
*(Minor in Mechanical Engineering)*  
Bryan M Peters\*\*  
Mathew Lee Rawson\*\*  
Elijah Andrew Stamp\*  
Casie Anne Taylor\*\*  
Alyias Coby Thomas\*  
*(Minor in Mathematics)*  
Zakrye D Toliver  
*(Minors in History and Optical Science & Engineering)*  
Nathan Leesman-Wiesner  
Robert Andrew Volkmann\*\*  
Darion Vosbein  
Aubrey L Zimmer\*\*\*  
*(Minor in Mathematics)*

## Bachelor of Science in Environmental Engineering

Joseph Hurd\*  
Austin Lee Starnes\*\*\*

## Bachelor of Science in Environmental Science with Geology Option

Antonio Charles Chavez\*\*

# UNDERGRADUATE DEGREES

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## Bachelor of Science in Environmental Science with Hydrology Option

Taylor Cecelia Yazzie\*\*  
(Minor in Environmental Engineering)

## Bachelor of Science in Management

Bethany Clarice Cannon\*

## Bachelor of Science in Materials Engineering

Ian Ahlen  
Emma Lahela Brudos\*\*\*  
Anne Mae Dunn\*  
Benito Silva  
(Minor in Chemical Engineering)  
Dylan Schroeder

## Bachelor of Science in Mathematics

David Maxwell Bennecke\*\*\*  
Bhumika H Bhakta\*\*\*  
(Minor in Secondary Education)  
Bishop Martin Cervantes\*\*\*  
(Minor in Secondary Education)  
Marissa Faith DiFederico\*\*  
Samuel Christopher Fisher\*  
Forest Taylor Good\*\*\*  
Simon August Kopischke\*  
Robert Josef Young\*\*\*

## Bachelor of Science in Mechanical Engineering

Matthew Steven Barber\*\*  
Levi Maximus Barela  
Tucker Lloyd Barraclough\*  
Juliana Xene Barstow\*\*\*  
Joseph David Bertrand\*  
DawnMonique Maria Cantu\*\*\*  
Logan Kye Caspersen\*\*\*  
Lillian Faye DeGroot\*\*\*  
Gage Charles Ellis\*\*\*  
Sebastian Espinoza  
(Minor in Electrical Engineering)  
Eric Alan Fielenbach\*  
Patrocinio Castaneda Flores\*\*\*  
Dylan T Fredrickson  
Hector Sebastian Grijalva\*  
Daniel Blake Guzman\*  
Jessica Courtney Gwilt\*  
Alex Mykel Hamilton\*  
Bolton Joseph Hick\*  
Charles Hill\*

Tristen Riley James\*  
Kaleb Sebastian Jewett\*\*\*  
Cason R Jones\*\*\*  
Mason Graham Kasproicz\*\*\*  
Garrett Lee LaLonde\*\*\*  
Amanda Ryanne Lague\*\*\*  
Alejandro Lopez\*  
Michael Richard Lucero  
William Richard Lucker  
Darren Tayaban Marcelino  
Adam Gerald Mirate\*\*  
James Robert Joseph Montoya\*\*\*  
Santiago R Montoya  
Matthew Garner Moore\*\*\*  
Paul Allen Morabito  
Eric Benjamin Nuñez\*\*  
Connor Xander Oakley\*  
Jakobe Nathaniel Ochoa\*\*  
John Cameron Padgett\*  
Derek Allen Plummer\*  
Michael Alexander Prothero  
Tharindu Ranasinghe\*  
Zachary Lee Richardson\*  
Eleanor Anne Rightley\*  
Ruben Moises Rodriguez-Hernandez\*  
Xavier J Romero\*  
Natalia Saiz\*\*  
Margarita Sandoval  
Matthew Keaton Spencer\*  
Zane Clay Stevens\*  
(Minor in Explosives Engineering)  
Sarah N Trujillo\*  
Reese T Turpish\*\*\*  
Matthew L Tyrrell\*\*\*  
(Minor in Electrical Engineering)  
Jack Peteris Vickerman\*\*\*  
Hunter Andrew Williamson  
Quinten Patrick Wood\*

## Bachelor of Science in Mineral Engineering

Nikolas Crosato  
Mariam Koanda\*\*  
Milaan Van Wyk\*\*  
(Minor in Earth Science)

## Bachelor of Science in Petroleum & Natural Gas Engineering

Josie Joann Hastings\*  
(Minor in Petroleum Geology)  
Sarah Feliz Skrien\*

## Bachelor of Science in Physics

Mariana Emelia Baca\*  
(Minor in Mathematics)  
Stefan L Beauchamp\*  
David Maxwell Bennecke\*\*\*  
Ariana Garcia\*\*  
(Minor in Mathematics)  
Forest Taylor Good\*\*\*  
Samuel R Moya\*  
Robert Staub\*\*\*

## Bachelor of Science in Physics & Mathematics

Adam Salazar\*\*

## Bachelor of Science in Physics with Astrophysics Option

Juliana Xene Barstow\*\*\*  
Celeste Elizalde Flores\*  
Wesley B Leavitt\*\*  
(Minor in Mathematics)

## Bachelor of Science in Physics with Atmospheric Physics Option

Brandon Lane Smith\*

## Bachelor of Science in Psychology

Mia Eve Karmesin\*\*\*  
(Minor in Biology)

## Bachelor of Science in Technical Communication

Kaleb Howard Bjorkman

# CORDS & TASSELS OF RECOGNITION & ACHIEVEMENT

## CORDS

### Royal Blue Cords

Office of Student Learning  
Tutors

### Mint Green Cords

Resident Assistants

### Red & Gold Braids

Passed the Fundamentals  
of Engineering Exam

### Navy Blue Cords / Gold, Black, Blue Braids

Sports Club Participants

### Black, Red, & White Cords

Esports

### Royal Blue & White Cords

Rugby

### Blue, White, & Gold Braids

International Students

### Red, White & Blue Braids

Veterans

### Royal Blue, Gold & Red Braids

Student Government  
Association (SGA)

### Emerald Green Cords

Student Research  
Symposium Presenter

### Gold & Silver Cords

Tech Scholars

### Lime Green Cords

Library Student Employees

## TASSELS

### White

Associates

### Orange

Engineering  
Undergraduate Level

### Yellow

Sciences  
Undergraduate Level

### Black

Master

### Old Gold

Doctorate

## MASTERS DEGREES

### Master of Engineering in Chemical Engineering with Specialization in Surface Engineering

Destiny Joy Crawford  
Arianna Elise Lopez  
Matthews

### Master of Engineering Management

Emmanuel Benjamin  
Hernandez

### Master of Engineering in Materials Engineering

Matthew Dougherty  
Kristian Renee Martindale

### Master of Engineering in Mechanical Engineering with Specialization in Explosives Engineering

Lydia Frost  
Tyler Guillen

### Master of Engineering in Mechanical Engineering with Specialization in Mechatronics Systems & Robotics

Rodrigo Cervantes  
Chris Michael Dinelli  
Rebecca Nicole Sappington

### Master of Science in Biology

Abigail Rose Brown  
Casia Esparza  
Katelyn Green

### Master of Science in Chemical Engineering with Specialization in Surface Engineering

Janet Baffoe  
Tahmidul Islam

### Master of Science in Chemistry

Jordyn Wemhoner

### Master of Science in Civil & Environmental Engineering with Specialization in Environmental Engineering

Gabriela Domenica Torres  
Fernandez

### Master of Science in Computer Science

Imtiaz Ahmed  
Anh Hood  
Kiran Padamnora Rayasa  
Rao

### Master of Science in Engineering Management

Matthew Hood

### Master of Science in Geophysics

Bryan R Thomas

### Master of Science in Hydrology

Rebecca Claire Moskal

# MASTERS DEGREES

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## Master of Science in Materials Engineering

Mohammad Chowdhury  
Christopher Lafferty  
Danielsen Moreno  
ThankGod N Nwokocha

## Master of Science in Materials Engineering with Metallurgical Engineering Option

Alex J Valdez

## Master of Science in Mathematics with Specialization in Operations Research & Statistics

Abdul Awal  
Md Maidul Husain

## Master of Science in Mechanical Engineering with Specialization in Explosives Engineering

Kailene Strebe

## Master of Science in Mechanical Engineering with Specialization in Mechatronics Systems & Robotics

Jared C Cannon  
Jesse Michael Montano  
Luke Strebe

## Master of Science in Mineral Engineering with Specialization in Geotechnical Engineering & Geomechanical Engineering

Benjamin Abankwa  
Bright Arko  
Sandra Abena Abuua  
Owusuaa Donkor  
Maria Camila Acevedo Garcia  
Abena Serwah  
Acheampong-Mensah  
Jeffrey Gordon  
Simon Lotero Lopez  
Santiago Navia Vasquez  
Angela Nataly Vanegas  
Valderrama

## Master of Science in Mineral Engineering with Specialization in Mineral Exploration

Ernest Brakohiapa  
Kyle Stafford

## Master of Science in Petroleum Engineering

Armando Lopez

## Master of Science in Physics with Concentration in Instrumentation

Francisco-Rey Albert  
Pedroza

## Master of Science in Transdisciplinary Cybersecurity

Elijah Pelofske  
Leroy Valencia

## Master of Science for Teachers

Arnida Mariano Acosta  
Miranda T Chavez  
Jennifer Martin  
Mary Yalnaty

## Professional Master in Transdisciplinary Cybersecurity

Parker B Alcone  
Summer Snow Bronson  
Gilbert Joe Carrillo

## Professional Master of Hydrology

Kevin Olson

## Master of Mineral Engineering

Lukman Alabede

## Master of Electrical Engineering

Xander Jones

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# 2024

# DOCTOR OF PHILOSOPHY DEGREES

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## **Doctor of Philosophy in Biotechnology**

Mendi Gonzalez Marquez

## **Doctor of Philosophy in Chemistry**

Lumala Nelum Perera Naullage  
Qi Wang

## **Doctor of Philosophy in Computer Science**

Zhirui Luo  
Ruobin Qi

## **Doctor of Philosophy in Earth & Environmental Science with Dissertation in Geophysics**

Jessica Aerts

## **Doctor of Philosophy in Mechanical Engineering with Dissertation in Intelligent Energetic Systems**

Christian Rolf Peterson  
Sivana Mirhai Torres

## **Doctor of Philosophy in Petroleum Engineering**

Mohamed Ahmed Abouzaid Mohamed  
Metwally  
Anthony Morgan

## **Doctor of Philosophy in Physics with Dissertation in Astrophysics**

Daniel Jensen

## **Doctor of Philosophy in Physics with Dissertation in Astrophysics**

Tatiana Magali Rodriguez

## Ph.D. COPPER DIPLOMAS

It is a tradition at NMT that Ph.D. recipients receive, in addition to the paper diploma, a copper diploma that has been explosively formed and etched in inimitable NMT fashion.

The process of creating these copper diplomas starts with a piece of copper that is placed in contact with a laser-etched rubber sheet that has all of the text of the diploma as well as a piece of explosive sheet material.

When the material is detonated, the explosive gases jet through the rubber, etching the words into the copper. In addition, a piece of aluminum foil is explosively welded and imprinted onto the copper that contains the New Mexico Tech Seal.

This special diploma incorporates the history of Tech's mining, materials, chemistry, physics, and engineering fields in a unique manner. It represents the science, innovation, and creativity that have been NMT hallmarks since our founding in 1889.

# HONORARY DOCTORATE DEGREE

## JOSEPH ZINECKER, Ph.D.

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New Mexico Tech has bestowed a posthumous doctorate in Geophysics to Joseph Zinecker, for “developing an elegant numerical research approach to show, for the first time, that submarine fans can deform continents.”

He earned a B.S. (1982) and M.S. (1985) in Electrical Engineering from the University of Houston. Joe began his career as a geophysicist in 1981, developing reflection seismology processing algorithms. In 1983, he worked at Texas Instruments as an electrical engineer on computational electromagnetics for frequency-selective surfaces. In 1985, he moved to LTV Aerospace & Defense/Lockheed Martin, retiring in January 2021.

Joe dreamed of getting a Ph.D., and he never gave up. He was accepted as a doctoral student in geophysics at New Mexico Tech and started January 2021.



Joe completed all the coursework except for graduate seminars. He also finished all research for his first publication and the first research chapter of his dissertation. The latter focuses on deformation of the Indian subcontinent as a result of loading of the Indian plate by the two largest submarine sediment fans on Earth: the Indus and Bengal fans. Other chapters were funded by the National Science Foundation. One goal of the project: to understand how forces that act on tectonic plate boundaries can propagate more than 1,000 kilometers into plate interiors and cause deformation there. Joe was building the first set of models when he passed away.

Currently, Dr. Jolante van Wijk, his advisor, and Joe’s son, Marcus (Ph.D. geology), are completing that work.

Throughout his career and as a Ph.D. student at NMT, Joe volunteered for many organizations: from New Mexico Science Olympiad to MD Anderson Cancer Center to the Nature Conservancy. Most important to Joe was his involvement with Boy Scouts of America. He was a Scout and adult leader from 1967 to 2021. For more than a decade, he volunteered as a backcountry geologist for the organization, teaching field geology on a yearly basis, most recently in 2023.

He passed away unexpectedly at age 63 on a return flight from holiday in Europe on December 30, 2023. JoAnne, his wife of 38 years, was by his side. Additional survivors include three children, two grandchildren, his parents, siblings, and numerous nieces, nephews, and cousins.



**NEW MEXICO TECH**  
SCIENCE • ENGINEERING • RESEARCH UNIVERSITY

# CLASS OF 2024

## THIS IS YOUR MOMENT

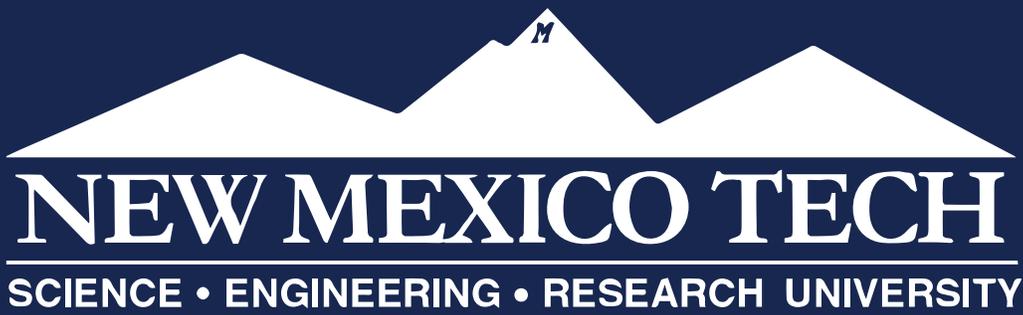
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To All of the NMT Graduates,

As your Dean of Students, I am proud of your accomplishments. Now, you stand on the threshold of a new journey; remember: the world awaits your brilliance, passion, and unwavering determination. Each step you take from this moment forward is a testament to your hard work and resilience. Embrace challenges as opportunities, failures as lessons, and success as a journey, not a destination. As you step across that stage, do so with courage, kindness, and an unwavering belief that your next steps will be the best. Congratulations, graduates. You are and will always be a part of our New Mexico Tech family.

Jennifer Chapman  
NMT Dean of Students





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nmt.edu