

THE UNIVERSITY OF NEW MEXICO SCHOOL OF ENGINEERING

FALL CONVOCATION

2024
CLASS OF



KIVA AUDITORIUM, ALBUQUERQUE CONVENTION CENTER

SATURDAY, DECEMBER 14TH, 2024

A MESSAGE FROM THE DEAN

Dear School of Engineering Graduates,

On behalf of the UNM School of Engineering, I congratulate you on your graduation.

Earning a degree in engineering, construction management, or computer science is an outstanding accomplishment that you and your family should be extremely proud of. I know all of the hard work you have put into your degree, and how much brighter, more collaborative, and

more innovative the world will be when new engineers, computer scientists, and construction management professionals join the workforce. You have all chosen a path

that is both inspiring and influential to the world around you.

I would also like to highlight the incredible faculty, staff, family members, friends and colleagues who have helped our graduates throughout their journey. You truly make the School of Engineering a great place to be. We look forward to cheering you on in all your career achievements and can't wait to hear about the impacts you will make on your local communities, the state of New Mexico, the nation, and the world in years to come.



Handwritten signature of Donna Riley in blue ink.

Donna Riley

Jim and Ellen King Dean of Engineering and Computing

FALL CONVOCATION

UNIVERSITY OF NEW MEXICO SCHOOL OF ENGINEERING
DECEMBER 14, 2024 • 4 P.M.

BOARD OF REGENTS

The laws of New Mexico provide for a Board of Regents which is responsible for the governance of The University of New Mexico. The Board’s power to govern the University includes fiduciary responsibility for the assets and programs of the University, establishment of goals and policies to guide the University.

The Board is comprised of seven members who are appointed by the governor of New Mexico, with the consent of the Senate, for the staggered terms of six years except for the student regent who is appointed for a two-year term. The governor and the secretary of education are designated as ex-officio, non-voting members.

The Regents

Kim Sanchez Rael, Chair
Jack L. Fortner, Vice Chair
Robert L. Schwartz, Secretary-Treasurer
William H. Payne
Paul Blanchard
Paula Tackett
Victor Reyes, Student Regent

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Convocation Program

Processional

FACULTY MARSHAL

Svetlana Poroseva, Professor, Department of Mechanical Engineering

BANNER CARRIER

Carol Jimerson, Department of Computer Science

PROCESSIONAL MUSIC

“Pomp and Circumstance March Number 1,”

Composed by Sir Edward Elgar

“Procession of the Nobels,”

Composed by Nicolai Rimsky-Korsakov

Performed by the New Mexico Brass Quartet

MASTER OF CEREMONIES

Shuang Luan, Associate Dean for Academic Affairs & Community Engagement

PRESENTATION OF DISTINGUISHED ALUMNI AWARD

Presenter: Yu-Lin Shen, Chair, Department of Mechanical Engineering

Recipient: Tim Thompson, UNM '90

KEYNOTE SPEAKER

Edward Angel, Professor Emeritus, Department of Computer Science

STUDENT SPEAKER

Melachi Sanchez, B.S., Mechanical Engineering

Eric Robbins, Ph.D., Civil Engineering

PRESENTATION OF BREECE AWARD

Presenter: Steven Graves, Associate Dean for Research and Innovation

Melachi Sanchez, B.S., Mechanical Engineering

PRESENTATION OF DEGREE CANDIDATES

Shuang Luan, Associate Dean for Academic Affairs & Community Engagement

Recessional

Platform Party

School of Engineering Administration

Donna Riley, Dean, School of Engineering

Shuang Luan, Associate Dean for Academic Affairs &
Community Engagement

Eva Chi, Associate Dean for Faculty Affairs, and Professor, Department of
Chemical and Biological Engineering

Steven Graves, Associate Dean for Research and Innovation

Lydia Tapia, Chair, Department of Computer Science

Susan Bogus Halter, Chair, Gerald May Department of Civil, Construction and
Environmental Engineering

Mark Gilmore, Interim Chair, Department of Electrical and Computer
Engineering

Yu-Lin Shen, Chair, Department of Mechanical Engineering

Charles B. Fledderman, Interim Chair, Department of Nuclear Engineering

Christina Salas, Director, Biomedical Engineering Program

Nathan Jackson, Director, Nanoscience and Microsystems Engineering Program

Marek Osinski, Optical Science and Engineering Program

Mattias Pleil, Director, Manufacturing Engineering Program

Distinguished Alumni Award

Tim Thompson

M.S., Mechanical Engineering '90



Tim Thompson is an entrepreneur and engineer whose career has been marked by transformative leadership and a visionary approach to business. Thompson earned his bachelor's degree from New Mexico State University and his Master of Science in Mechanical Engineering at UNM in 1990, laying the foundation for his successful career in engineering and technology.

Thompson began his career at Los Alamos National Laboratory where he worked as the Group Leader of Design Engineering.

While working at LANL, he led the engineering effort on the world's first all-composite satellite, FORTE. He was also the Chief Engineer for the Superconducting Super Collider's Particle Tracker, GEM.

Later in his career, Thompson led multiple companies as CEO, including HYTEC, a technology company in Los Alamos and IMTEC, a 300-person enterprise later sold to 3M. In 2010, Thompson founded AvaDent, a groundbreaking dental technology start-up that introduced the world's first digitally designed and manufactured dentures. His entrepreneurial spirit and strategic foresight were key to AvaDent's success.

Throughout his career, Thompson has built an extensive global business portfolio, spanning sales and marketing, supply chain management, financial management, production engineering, product development, process development, project management, and quality management systems. His leadership and dedication to innovation have not only shaped successful companies but have also inspired future generations of engineers.

He remains deeply committed to fostering the growth of mechanical engineering talent in New Mexico, particularly through his support of graduate programs at both the University of New Mexico and New Mexico State University.

Keynote Speaker

Edward Angel



Edward Angel is a professor emeritus of Computer Science at The University of New Mexico and the founding director of ARTSLab — which stands for art, research, technology and science — an award-winning interdisciplinary center for emerging media with an emphasis on immersive and interactive technology.

Angel received his Bachelor of Science in Engineering from the California Institute of Technology in 1964 and a Ph.D. in Electrical Engineering from the University of Southern California in 1968.

At the time, he never could've imagined where life would take him. Now he advises graduates to be open to the opportunities that come their way.

"I would say to them, some of you may think you know what you want to do, but things are going to happen and you're going to have choices and some of them can be very exciting. So, keep your eyes open and don't be afraid to make a change," he said.

Angel's long career is marked by an openness to collaborate and take risks. Working on biomedical technologies at USC eventually led him to the University of Rochester where he had the opportunity to work in the Obstetrics and Gynecology Department researching on the high-risk labor floor working with ultrasound and fetal monitoring.

Angel started at UNM as a professor in Electrical and Computer Engineering but was soon roped into teaching a computer graphics course, a completely new subject for him at the time. He eventually became the chair of Computer Science.

Angel's life took another turn after a visit from a young artist interested in the motion graphics he saw in movies. The coursework, collaborations and grant proposals that stemmed from the conversation eventually grew into ARTSLab, now its own creative maker space on the UNM campus.

"One thing led to another but it all started because somebody walked into my office one day."

About the George E. Breece Award

The George E. Breece Award was established in 1921 to honor the UNM School of Engineering senior with the highest grade-point average from each graduating class. The recipients of this award consistently have grade-point averages higher than 4.0, reflecting a majority of A+ grades throughout their undergraduate courses.

Melachi Sanchez

B.S., Mechanical Engineering



It would be a significant achievement to earn the highest undergraduate grade-point average in the graduating class or to serve as a speaker for the School of Engineering Commencement, but this Fall, Melachi Sanchez will do both. This semester, he graduates with his Bachelor of Science in Mechanical Engineering, earning high marks and several close friends to study with along the way, but it wasn't easy.

Sanchez thought college would be a breeze. Math and science always came naturally to him, so he didn't study a lot in his first few months at UNM. By the end of his first semester, his GPA was so low, he'd lost his scholarship. With no job and no way to pay for school, he realized he'd arrived at a crossroads. It would've been so easy to walk away from school, he reflects now, but his mom stepped in and offered to help pay his tuition. He knew he wanted to make her proud. It was time to hit the books.

"I've never had to work harder for anything else in my entire life," he said.

Now on the other side, his lowest point has transformed into a badge of honor he shares with the friends and family who pushed him to do better. In his second year of school, he went out of his comfort zone and asked to join someone else's group project. The group became inseparable friends, coordinating their study time, class schedules and graduation dates along the way, all the while pushing each other to work their hardest.

"I don't think I could've accomplished what I have without my college friends," Sanchez said. "It's never been competitive. It's always been about everyone putting in as much effort as they can and if somebody gets a good score or if someone gets a bad score, it's just congratulatory or supporting and helping them get better."



Melachi Sanchez (third from Left) with his team and advisors at the Engineering Expo.

The support paid off. Last Spring, Sanchez and his friends received first place in the Engineering Expo poster competition for their Design 5 Track project where they developed a dynamic prosthetic interface, for elite, competitive para-athletes. Working on the capstone is among his favorite memories from UNM. He and the group pulled an all-nighter to finish the written component of the project. When they went to read the lab report at nearly 4 a.m., they all started laughing uncontrollably. Now, the group will celebrate graduation together.

Reflecting on his time at UNM, Sanchez has some words of wisdom.

“My advice for others is don’t give up and put in as much work as you can without getting to a point where you are burned out and want to quit,” Sanchez said. “What really helped me was having stuff I liked to do outside of school.”

In his free time, Sanchez enjoys reading and watching movies, especially the extended edition of the Lord of the Rings. Faith and spending time with family also helped give his life balance while earning his degree.

After graduation, Sanchez plans to continue working at Intel, where he currently interns.

Graduate Speaker

Eric Robbins

Ph.D., Civil Engineering



Some students have their eyes set on graduate school years before they apply, but if you ask Eric Robbins, getting a Ph.D. in Civil Engineering was sort of a happy accident.

“I’d say I kind of stumbled on it. I definitely did not have my mind set on it beforehand, but it was really a great experience,” he said.

When he came to UNM as a first-year undergraduate student, Robbins initially planned to study architecture, but a few classes later he realized he wasn’t passionate about the topic

and changed majors to Civil Engineering. That simple decision caused a ripple effect that led him to a passion for studying nonlinear structural dynamics.

After finishing his Bachelor of Science, Robbins considered a master’s in Mechanical Engineering, but Associate Professor Fernando Moreu encouraged him to stay in Civil and conduct multidisciplinary research with him. For his master’s thesis, Robbins studied Low-cost Efficient Wireless Intelligent Sensors for Strain (LEWIS-S) and applications in nonlinear dynamics, or the mathematics that help us understand the cause and effect relationships in complex systems to measure and characterize the responses of structures subjected to vibrations.

Master’s degree in hand, Robbins was ready to jump into the workforce, but within a few months, Moreu got funding for a Ph.D. student focused on nonlinear structural dynamics and encouraged Robbins to apply. Since then, he’s been able to study the subject from both modeled and experimental perspectives. Most recently, he worked with a mock aircraft wing with a pylon bolted on as a test system.

Reflecting on his time at UNM, Robbins was grateful for the chance to network with researchers from Sandia National Labs, Los Alamos National Lab and the Air Force Research Lab.

“UNM has done an excellent job of collaborating with a lot of the labs and those connections are just awesome to have,” he said. “I think it’s given a lot of my colleagues and myself really good opportunities to get our foot in the door at some of the high-caliber research laboratories.”

After he graduates from UNM, Robbins plans to work as a post-doctoral fellow at Sandia National Labs.

DEGREES AWARDED

Order of Presentation

Department of Computer Science
Gerald May Department of Civil, Construction & Environmental
Engineering
Department of Electrical & Computer Engineering
Department of Mechanical Engineering
Department of Nuclear Engineering
Department of Chemical & Biological Engineering
Biomedical Engineering
Nanoscience & Microsystems Engineering
Optical Science & Engineering

Student Award Recognition

“Graduating with Distinction” (symbolized by a † by the student’s name) recognizes the exceptional performance of students who graduate with a master’s or doctor of philosophy degree. The status is determined at the time of the final examination through agreement of the examining committee members, with final approval given by the department chair.



COMPUTER SCIENCE

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Adrian J. Abeyta
Alexander K. Adams
Gal Arad
Joseph E. Barela*
Jyrus W. Cadman
Katherine V. Clark
Aashutosh Dahal
Muhammad Danish
Samuel R. Dauk
Jingru Dou
Caleb R. Frisch*
Carter B. Frost
Patrick I. Fry
Marc S. Garbanzos
Joel D. Gloetzner

Ricardo A. Gonzales
Jacob K. Graves
Sebastian L. Hoang*
Matthew Horst
Aayush Kafle
Ian G. Kahn
Sho Komiyama
Dominic M. Larranaga
William L. Lopez
Edward R. Lowery
Kaleb A. Luke
Robert M. McCourt
Hugh S. McFall
Timothy S. Montoya
Justin X. Nelson

Jerry M. Nieto
Michael A. Pacheco*
Thinh M. Pham
Andrei H. Phelps
Daniel N. Prairie
Fermin Ramos
Sara N. Romero
Nathan J. Rowe
Ryan D. Scherbarth
Pavan Kumar Singara*
Vamsi Krishna Singara*
Andrea L. Torres
Meiling T. Traeger
Yun Zheng
Andrew Zhuang

MASTER OF SCIENCE IN COMPUTER SCIENCE

Manju A. Bhusal
Thomas J. Fisher
Kaveh Malek*
Michael Servilla
Christopher Tye

CIVIL, CONSTRUCTION AND ENVIRONMENTAL ENGINEERING

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Austin M. Bassford
Derek J. Capitan
Josephine M. Chavez
Logan W. Fairhurst

Brea L. Jarrell
Ryan D. Pennington
Michael J. Sedillo
Victor S. Valles*
Guadalupe Villalobos

BACHELOR OF SCIENCE IN CONSTRUCTION ENGINEERING

Willow R. Aguirre
Shannon S. Harlan
Gabriel R. O'Herron-Alex

BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT

Adrian Jimenez*
Shenoa I. Jones*
Kevin E. Sanchez Macias
Jacob Reynolds
Gerardo Rios*
Hunter W. Triplehorn

MASTER OF ENGINEERING

Jose Alfonso D. Apura
Brandon S. Sisk

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Alan J. Barney*
Dominica J. Bennett*
Travis B. Broadhurst
Yully T. Chaves Lasso†*

Adrianna L. Fragozo
Arian Golrokh Amin*
Maycee Hurd†*
Jack A. Ivey
Eric A. Josep†

Tahereh Kookhaei
James J. Rawson
Olivia Tafoya
Daiquiri D. Zozaya*

MASTER OF CONSTRUCTION MANAGEMENT

Jasmine Muñoz

DOCTOR OF PHILOSOPHY IN ENGINEERING

Michelle M. Anderson*
Md Mehedi Hasan†
Angela C Montoya
Eric Robbins
Muhammad Saeed Zafar†

ELECTRICAL AND COMPUTER ENGINEERING

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Aaron D. Catanach
William A. Hamel
Darrion S. Ricketts

James D. Tapia
Stefani M. Vallejos
Licheng Zhang

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

Raymond J. Barrow
James D. Fenimore
Morgan K. Krueger

Dorothy Mberile
Eric Morales
Phillip I. Ortiz
Cody L. Tyler

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING

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Kenzie Allen Cablay Endrina*
Sourav Chakraborty
Rachel D. Dipirro
Derek Dunifer

Ryan Eckman
Laila B. Fauzi
Trevor L. Foust
Daniel J. Garcia
Nicholas Makridakis*

Bilal A. Malek *
Vishnu V. Nampoothiri
Hannah M. Pavelka
Julian A. Perez
John C. Quinlan

Aban Samimi Motlagh
Dipesh Bhandari Shah
Jeffrey G. Stone
Sriram Thotakura

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Issiac M. Baca†
Tiamike I. Dudley†
Ugesh Egala*
Saneeth Reddy Etikala
Manoj Kumar Gavireddy Gari
Alex Hostick

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Rowan A. Kinney†
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Elexis A. Panas
Matthew Piotrowski
Arianna Santamaria Penafiel
Lakshmi Prasanna Tanikonda
Swastika Tenkila Purushotham†
Sean J. Tsikterist†
Deepika Venkatesulu

DOCTOR OF PHILOSOPHY IN ENGINEERING

ELECTRICAL ENGINEERING

Ralph L. Gesner
Seyed Alireza Ghasempour Shirazi
Raul E. Gutierrez*
Maren W. Hatch*

Vignesh Sivaramakrishnan†
Julie C. Smith
David O. Smith†
Jayakrishnan Vijayamohanam

COMPUTER ENGINEERING

Adedamola P. Adesokan
Md Sahabul Hossain
Jenilee Jao
Nicholas A. Kemp†*

Daniel Manu*
Idris O. Somoye†*
Liangkun Yu*

MECHANICAL ENGINEERING

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Antonio R. Alderete
Stacy A. Brossy
Isaiah W. Burtnett
McKenna R. Collins
Eric I. Cornell
Katherine Crutcher
Daniel N. Gallegos
Benjamin P. Kuhlman
Dionicio M. Maestas

Ethan Rashap
Melachi M. Sanchez
Gabriel A. Serrano*
Cade A. Sickafoose
Alexander J. Sweis
Annika R. Tedstrom
Arturo Trejo Perez
Grant J. Van Winkle
Daniel Walter
Emma D. White

MASTER OF SCIENCE IN MECHANICAL ENGINEERING

Leilani M. Baker
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Zachary L. Bernius^{†*}
Felicia Brimigion[†]
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Theodore J. Mullee
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Marco A. Nieto
Rhianna M. Oakley[†]
Jacob M. Romero
Randolph C. Vasquez
Samuel G. Zsiga*
Sudheer Kannoju

DOCTOR OF PHILOSOPHY IN MECHANICAL ENGINEERING

Kaveh Malek

NUCLEAR ENGINEERING

MASTER OF SCIENCE IN NUCLEAR ENGINEERING

Anutam Bairagi
Christine Kalogeras
Ethan S. Krammer
Ashley K. Machado
John-Ryan Romo
Jesus J. Valencia*

DOCTOR OF PHILOSOPHY IN MECHANICAL ENGINEERING

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Benjamin R. Murphy

CHEMICAL AND BIOLOGICAL ENGINEERING

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

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William E. Jones
Tyler P. Kendall*
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MASTER OF SCIENCE IN CHEMICAL ENGINEERING

Alexander J. Baten
Cielo M. Gonzales Kirkpatrick

DOCTOR OF PHILOSOPHY IN CHEMICAL ENGINEERING

Sleight Halley*
Mohammed I. Khalil
Angela Maestas-Olguin

INTERDISCIPLINARY PROGRAMS

BIOMEDICAL ENGINEERING

DOCTOR OF PHILOSOPHY IN BIOMEDICAL ENGINEERING

Kendall D. Hoff†
Shepard Moore
Mariella Digna Padilla

NANOSCIENCE AND MICROSYSTEMS ENGINEERING

MASTER OF SCIENCE

Mary P. Haley*
Luis Emilio Payan Ramirez
Ira Shubert

DOCTOR OF PHILOSOPHY

Christopher J. Fetrow*
Quinn McCulloch†*

OPTICAL SCIENCE AND ENGINEERING

MASTER OF SCIENCE

Megan Frost
Amilcar Jeronimo Perez
Ali Shotorban
Hosuk Lee†
Yankang Liu
Meagan Parker
Stephen Shock

DOCTOR OF PHILOSOPHY

Hasan Ahmed
Dominic Bosomtwi*
Troy Hutchins-Delgado
Nazanin Mosavian
Sami A. Nazib*
Mingyang Zhang*



Congratulations and Welcome!

Congratulations, graduates! Now that you have graduated, you are automatically a member of the UNM Alumni Association. There are no dues. Visit the UNM Alumni Association website for information and a complete listing of benefits at unmalumni.com.

We also welcome you to the School of Engineering alumni family. The UNM School of Engineering strives to keep you connected to the School in the most convenient way possible. As you move forward, please keep us informed regarding address changes, career moves, and significant events in your life. If you are interested in collaborating on an activity to engage fellow alums, let us know.

Keep us posted at engineeringinfo@unm.edu or at goto.unm.edu/alumniupdate