I am delighted and honored to welcome you to the University of New Mexico School of Engineering Convocation. It is a memorable day in your lives and a special day for those who helped you get ready for this graduation—family, friends, teachers, classmates, colleagues, coworkers, counselors, advisors, and more. All of them are proud to have been part of your experience at the University of New Mexico and they wish you a successful and satisfying career.

Today we celebrate the impressive accomplishments of our graduating students and we acknowledge their dedication, commitment, and perseverance. Your academic successes are likely to carry over into professional, personal, and social achievements. We are excited about watching your careers flourish and we hope that you will always be part of our academic family.

As you graduate from our School of Engineering, remember that you are part of a distinguished tradition that started with the founding of the School in 1906 and will be continued by your own work across our beautiful state and across the world. Our School and its graduates represent a powerful engine of economic and social development. You had the opportunity to witness first hand the creation of new ideas and technologies and to learn from leaders in the field of science and engineering. It is now your turn to creatively apply the knowledge and experience you gained during your studies for the good of society at large.

Graduates, we welcome you to the distinguished company of the School of Engineering alumni and wish you every success in your new endeavors.

Gruia-Catalin Roman
Dean, UNM School of Engineering
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, and oversight of the functioning of 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 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
Jack L. Fortner, President
Don L. Chalmers, Vice President
Carolyn J. Abeita, Secretary-Treasurer
J. E. "Gene" Gallegos
James H. Koch
Lieutenant General Bradley C. Hosmer
Jacob P. Wellman, Student Regent

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Front cover: Mechanical Engineering Chair Christopher Hall with Mechanical Engineering graduates Joshua Herrera and Elisa Wasson.
Convocation Program

Processional

Faculty Marshal
Robert H. Greenlee, Professor, Mechanical Engineering

Banner Carrier
Pamela Hurd-Knief, Dean’s Office

Processional Music
“Pomp and Circumstance March Number 1,” Composed by Sir Edward Elgar
“Procession of the Nobles,” Composed by Nicolai Rimsky-Korsakov
Performed by The New Mexico Brass Quintet

Master of Ceremonies
Charles B. Fleddermann, Associate Dean for Academic Affairs

Greetings
Catalin Roman, Dean, School of Engineering

Keynote Speaker
Brian G. Burnett, P.E., President, Bohannan Huston
B.S., Civil Engineering, ’78; M.S., Hydrology and Water Resources, ’80

Student Speakers
Nialls Christian Chavez, B.S., Computer Science, ’12
Christopher Charles Lamb, Ph.D., Electrical and Computer Engineering, ’12

Presentation of Breece Awards
Presenter: Charles B. Fleddermann, Associate Dean for Academic Affairs
Awardees: Peter F. Crowder, B.S., Chemical Engineering, ’12
Anthony Lee Hickerson, B.S., Computer Science, ’12

Presentation of Degree Candidates
Charles B. Fleddermann, Associate Dean for Academic Affairs

Recessional
Platform Party

Distinguished Guests
Gregory Heileman, Associate Provost for Curriculum

School of Engineering Administration
Catalin Roman, Dean, School of Engineering
Charles B. Fleddermann, Associate Dean for Academic Affairs
Christopher D. Hall, Chair, Department of Mechanical Engineering
Luke F. Lester, Interim Chair, Department of Electrical and Computer Engineering
George F. Luger, Interim Chair, Department of Computer Science
John Stormont, Chair, Department of Civil Engineering
Timothy L. Ward, Chair, Department of Chemical and Nuclear Engineering

Faculty Marshal
Robert H. Greenlee, Professor, Mechanical Engineering

Keynote Speaker
Brian G. Burnett, P.E., President, Bohannan Huston
B.S., Civil Engineering, '78; M.S., Hydrology and Water Resources, '80

Student Speakers
Nialls Christian Chavez, B.S., Computer Science, '12
Christopher Charles Lamb, Ph.D., Computer Engineering, '12
Brian G. Burnett, P.E.

B.S., Civil Engineering, '78
M.S., Hydrology and Water Resources, '80

Brian G. Burnett, P.E., is the President of Bohannan Huston, one of New Mexico's largest engineering consulting firms. The company has been in business since 1959 and has over 180 employees in Albuquerque, Las Cruces, and Denver.

Throughout his career, Mr. Burnett has been responsible for both the technical and approval aspects of projects, developing the ability to work successfully with many diverse customers around New Mexico and regionally.

Mr. Burnett has served in a leadership position on a variety of professional organizations and community service groups. He is Past-President of the American Council of Engineering Companies (ACEC) – New Mexico Section, Associated Commerce and Industry, and the UNM Alumni Association. He currently serves as the Chair of the UNM Civil Engineering Department Advisory Board and is Vice-Chair of the Presbyterian Healthcare System Board of Directors.

Mr. Burnett has been recognized professionally with such awards as the Engineer of the Year Award from the State Section of the New Mexico Society of Professional Engineers, the Greater Albuquerque Chamber of Commerce Chairman's Award of Excellence, the UNM Civil Engineering Department Distinguished Alumni Award, the UNM School of Engineering Distinguished Alumni Award, and the UNM Alumni Association Zia Award.

Through his leadership roles, Mr. Burnett actively promotes New Mexico's job growth, sound water policy, and infrastructure investments that benefit future generations of New Mexicans.
Student Speakers

Nialls Christian Chavez

B.S., Computer Science, '12

Nialls grew up in Albuquerque and was home-schooled by his mother. He's grateful to his parents for their support and encouragement, calling them his biggest advocates.

His interest in Computer Science stems from a programming class at the Career Enrichment Center, an APS science, technology, and vocational magnet school. Nialls went to CNM for his prerequisites and finished his CS curriculum at UNM in two years.

He is already applying his degree in a full-time programming job at POSLavu, a point of sale software company based on Apple's iPad and iPhone technologies.

Nialls has pursued rock-climbing all over New Mexico and many parts of the US. He also likes snowboarding and cycling.

Christopher Charles Lamb

Ph.D., Computer Engineering, '12

Chris is a principal engineer at Sandia National Labs, helping to ensure the security of large-scale computer systems.

During his Ph.D. program at UNM, Chris was affiliated with the Informatics Group in the Electrical and Computer Engineering Department, working on information security in next-generation Internet networks. In 2002, Chris received an M.S. in Computer Science, also from UNM. His M.S. thesis is on using evolutionary programming techniques to defend against distributed attacks, and his Ph.D. dissertation addresses protecting information in future internet-scale networks. Chris will continue with the Informatics Group as a research professor at UNM.

Chris has been married for 17 years and has two children; his daughter Chloe is ten and Hanna is four. He is grateful to his wife Missy, who has been tremendously supportive throughout his studies. Both of them are very glad he has finished his graduate degree programs.
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.

**Peter E. Crowder**
B.S., Chemical Engineering, ’12

As an NSF Scholar, a School of Engineering Scholar, and an SOE Ambassador, Peter represented the school at various events. In 2012, his team won first place in the International Environmental Design Contest. Peter will start a job in materials engineering at Chevron in Houston in March and thanks his family for their support. He enjoys whitewater kayaking and snow skiing.

**Anthony Lee Hickerson**
B.S., Computer Science, ’12

Tony participated in motion planning research with Computer Science faculty and intends to work as a software engineer, developing and improving computer applications. He is very appreciative of the support shown by the School of Engineering faculty and staff that have made UNM such a great experience for him. Tony is an NSF Scholar and volunteered at many UNM Engineering events.

**Luke Allen Yates**
B.S., Mechanical Engineering, ’12

Luke came to UNM after working as a supervisor in the Heating Ventilating and Air Conditioning (HVAC) field a few years after high school. He has an internship at Sandia National Labs, was on the LOBO Motorsports team, and is in Pi Tau Sigma, Tau Beta Pi, and the Association of Energy Engineers. Luke plans to pursue his Ph.D. and research nano/microscale heat transfer. He enjoys racquetball, mountain biking, rock climbing, and backpacking.
Convocation Traditions

Throughout their long and proud history, universities have retained and cherished strong ties to their ceremonial roots. When English universities were taking form in the twelfth and thirteenth centuries, scholars were also clerics. They adopted robes similar to those of their monastic orders. Caps were a necessity in the drafty buildings and copes, or capes with hoods attached, were needed for warmth.

School of Engineering Convocation

The School of Engineering Convocation pays tribute to the history and traditions of graduations throughout the ages. The bachelor’s gown is red, has long sleeves, and is worn closed. The master’s and doctor’s gowns are black. The cap, originally round, is now a square mortarboard and is the same for all degrees. Caps are traditionally black with a long tassel fastened to the mid-point. The tassel is worn on the right side until the degree has been conferred; it is then worn on the left. The hood indicates the type of degree and the official color or colors of the university conferring the degree. For example, the color orange represents engineering, and that color is used on the velvet binding or edging of the hood. The official University of New Mexico colors are cherry and silver, so the hood is lined with silver gray with a chevron of cherry red.

The Convocation begins and ends with a colorful academic procession, led by a staff member carrying a banner in front of the School of Engineering degree candidates. The faculty marshal is usually selected from School of Engineering emeritus faculty, an honorary title for retired full-time faculty. The faculty marshal carries a mace or ceremonial staff and leads the platform party, composed of School of Engineering academic leadership, UNM regents and dignitaries, and convocation speakers.

The mace traces its origins to a medieval weapon and was later carried before kings and high church officials as a ceremonial emblem of authority. The School of Engineering mace was designed by Dean Emeritus Joseph L. Cecchi and constructed in 2003 by engineering staff member Penn Davis. The mace handle is connected to a machined aluminum cube with wood panels inscribed with the University Seal and “The School of Engineering 1906,” the year the School was founded. The mace is crowned by a wooden sphere.
Engineering instruction at the University of New Mexico has a rich tradition, beginning in 1906, with four-year programs in Civil, Electrical, Mechanical, and Mining Engineering. The first Bachelor of Science degree was awarded in June 1912. By 1916, enrollment was at 37 with two or three graduates each year. In 1947, the Department of Chemical Engineering was established, and in 1972 it expanded to the Department of Chemical and Nuclear Engineering. Computer Science courses were initially offered in the Mathematics Department and in 1976, the Computer Science Department was established. With the addition of Computer Engineering to the Department of Electrical Engineering in 1979, the present-day complement of academic departments was in place.

This fall, the UNM School of Engineering enrolled over 1100 students in nine undergraduate degree programs and close to 700 students in more than a dozen graduate degree programs. These degrees are offered through the School’s five academic departments and, increasingly, through interdisciplinary and interdepartmental programs. Research is integrated into each degree program in an environment that fosters teamwork, cultural and intellectual diversity, a strong sense of public responsibility, and lifelong learning. An exceptionally active research faculty work in critical and cutting-edge areas, collaborating within UNM and with other universities, the national laboratories, and industry to develop innovative solutions for societal challenges.
Degrees Awarded

Order of Presentation
Department of Chemical and Nuclear Engineering
Nanoscience and Microsystems
Department of Civil Engineering
Department of Computer Science
Department of Electrical and Computer Engineering
Optical Science and Engineering
Department of Mechanical Engineering
Manufacturing Engineering

Graduate Student Recognition
“Graduating with Distinction” 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.
Chemical and Nuclear Engineering

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

Stephen P. Clark* Jared M. Gilbert Emma J. Renteria*
Peter Frederick Crowder Kylen S. Johns Dharma S. Voisine*
Chelsey J. Fenton Lisa M. Lowery

BACHELOR OF SCIENCE IN NUCLEAR ENGINEERING

Alex S. Bennett Andrew M. Tonigan

MASTER OF SCIENCE IN CHEMICAL ENGINEERING

Richard E. Blakeley Andres L. Sanchez* Abishek Venkatakrishnan
Danielle M. Lussier Travis J. Savage*

MASTER OF SCIENCE IN NUCLEAR ENGINEERING

Matthew A. Gonzales Dominic A. Maes* Paul D. Ward
Erin I. Husher Jacob M. Miller
Ryan J. Kamm Boyce W. Travis

DOCTOR OF PHILOSOPHY IN ENGINEERING

Shayna R. Brocato Ulises A. Martinez Michael J. Rising
Rodney L. Keith Anant J. Patel Kristin N. Wilde*

Nanoscience and Microsystems

MASTER OF SCIENCE IN NANOSCIENCE AND MICROSYSTEMS

Alaa A. El Maoued* Rachel M. Hjelm* John B. Plumley
James A. Fitch Dung T. Nguyen*

DOCTOR OF PHILOSOPHY IN NANOSCIENCE AND MICROSYSTEMS

Jared N. Roy Adam T. Wise

*Summer 2012 Graduates †Graduating with Distinction
Civil Engineering

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Marcus R. Barry  Ryan Joseph Curley  Christopher J. Primm
James Logan Brandenburg  Steven Paul Gomez  Keith L. Thompson
Lawrence Ricky Bustos  David Gabriel Gutierrez  Mark Jeff Toledo

BACHELOR OF SCIENCE IN CONSTRUCTION ENGINEERING

Michelle L. Begaye

BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT

Cory Alan Echternacht  Michael E. Franco  Jesus A. Ortiz

MASTER OF SCIENCE IN CIVIL ENGINEERING

Douglas Chan Austin  Austin Phillip Heermann  Jeffrey Eric Samson*†
Hasan Mohammad Faisal  Jadranka Matic  Bhanu Kiran Tuniki*
Hossein Honarvar Gheitanbaf  Md Mostaqr Rahman

MASTER OF CONSTRUCTION MANAGEMENT

Chase Barron Dudley  Rudolph John Lovejoy*

DOCTOR OF PHILOSOPHY IN ENGINEERING

Mohammad Jalalpour*†  Yunjie Tu*†

*Summer 2012 Graduates  †Graduating with Distinction
Computer Science

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Sean Wesley Brown  Anthony Lee Hickerson  Nathanael Pratt Rackley
Nialls Christian Chavez  Jacob A. Hobbs  Ryan Isidro Romero
Leland Brooks Evans  Michael J. Mellone  Lucia Sashka Short
Tyler W. Fulcher  Jan Monterrubio  Valerie Shea Steinhaus

MASTER OF SCIENCE IN COMPUTER SCIENCE

Nicholas Edward Aase  Michael Robert Jacobi  Nasser John Salim
Ekaterina Alexandra Davydenko  Justin Mark Kellogg  Reffat Sharmeen
Taylor Liles Groves  Chien-Chi Lo
John Richard Harger  George Wagdy Helmy Saad

DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

George Barreto Pereira Bezerra*†  Michael Matthew Groat  Ricardo Villalon
Sunny James Fugate  Mark Joseph Olah†

*Summer 2012 Graduates  †Graduating with Distinction
**Electrical and Computer Engineering**

**BACHELOR OF SCIENCE IN COMPUTER ENGINEERING**

Andrew Paul Delgado  Phillip Paul Garcia  Elias M. Paz-Rudolph*
Andrew Joshua Downs  Ross Michael Kelly  Kevin J. Warne
Jordan Andrew Espinosa  Steven Michael Montoya*  Noah Zachariah Wolfe

**BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING**

Matthew Shawn Churchman  Shadi Atef Khader*  Carlos Phillip Ortiz Y Pino
Milton Ricardo Flores Flores  Brian David Marquez  Manuel Perea IV*
Walter Lewis Gordy*  Jessica L. Nelson*  Andrew J. Sandoval
Erfan Hakiman  Duc Dang Nguyen

**MASTER OF SCIENCE IN COMPUTER ENGINEERING**

Cesar Alberto Carranza  Tony Maokhamphio*  Joshua Joseph Trujillo
Japji Hundal  Apoorva Sateesh  Rosemary Renee Williams

**MASTER OF SCIENCE IN ELECTRICAL ENGINEERING**

Seyed Shwan Ashrafi*  Andrew William Gamulja  Xuyuan Pan
Georgios Atmatzakis*  Justin David Harms  Pravin M. Patel
Patricio Javier Cruz Davalos  Mehdi Hasan*  Kanamu J. Pupuhi
Alireza Dirafzoon*  Veronica Ordonez Jacob  Ryan Aaron Schlegel*
Michael Nathan Echert  Smitha Keshavmurthy  Amir Shirkhorshidani
Saba Emrani*  Cassandra Lynn Mendonca
David Ray Galbreath*  Stephen Andrew Myers

**DOCTOR OF PHILOSOPHY IN ENGINEERING**

Carla Paola Agurto Rios  Christopher Charles Lamb  Alejandro Gonzalez Ruiz
Nutan Gautam*  Charles Daniel Lamech*  Shawn Ellis Taylor*
Alireza Ghaffarkhah*†  Mehrzad Malmirchegini†  Domagoj Tolic
Woo-Yong Jang  Ivana Palunko  Qi Wang†
Willie Christopher Kiser†  Ashwin K. Rishinaramangalam*

*Summer 2012 Graduates  †Graduating with Distinction
Optical Science and Engineering

MASTER OF SCIENCE IN OPTICAL SCIENCE AND ENGINEERING

Mohammad-Ali Hosseini Dokht*  Mohsen Nami  Nassim Rahimi*
Brian R. Kamer  Jason R. Oberling*

*Summer 2012 Graduates  †Graduating with Distinction
Mechanical Engineering

Bachelor of Science in Mechanical Engineering

Joaquin Borja          Megan Luna Mentillo          Howard A. Rennis
Gordon Everett Byers  Stormy Ray Molina          Dionicio Favian Rios
Roger L. Chavez       Nicolita Rebecca Montoya       Matthew Nicholas Robinson
Luke Houlden Engvall  Servio Tulio Moreno          Eric Michael Ulrich
Steven Kevin Fitzwater Andrew W. Murphy            Elisa M. Wasson
Joshua Michael Herrera Gregory Michael Naranjo      Patrick John Wayne
Christopher Thomas Kirby Crystal Ariana Plont       Luke Allen Yates
Andrew Michael Krieger Jose Fernando Najera Puente
Nicholas J. Martinez   Brenda L. Quintana

Master of Science in Mechanical Engineering

Adam W. Cook           Manuel N. Martinez            Jude M. Oka
Jeremy L. Guthrie     Robert T. Miner
Christopher M. Handy  Dominic A. Munoz

Doctor of Philosophy in Engineering

Khawar Abbas           Dominic R. Maestas            Matthew A. Neidigk
Drew Francis Goettler  

*Summer 2012 Graduates
†Graduating with Distinction
MESSAGE FROM THE ALUMNI ASSOCIATION

Congratulations, Graduates!

Now that you have graduated, you are automatically a member of the UNM Alumni Association. There are no dues.

The Alumni Association and Alumni Relations Office keep the University of New Mexico and its alumni communicating and connected.

The UNM Young Alumni Chapter caters to the needs of alums who graduated from UNM within the last 15 years, whether they stay in New Mexico or relocate to another state.

Visit the UNM Alumni Association web site for information, including career exploration sites, temporary health insurance information, alumni publications, links to online communities, and much more. For a complete listing of benefits, go to http://www.unmalumni.com.

Again, congratulations from the UNM Alumni Association!
Guidelines for Graduates and Guests

Cooperation Requested

Family members and guests are encouraged to take photos of the ceremony and the graduates. While taking photos, please be courteous and respectful of the students leaving the stage. The audience may not enter the stage area at any time during the program.

Commencement Photographer

Grad Images will take candid photographs of all graduates at their special moment of recognition. Graduates will receive a free proof of this photo via email and regular mail within 5 to 7 days following the ceremony. You may place orders or obtain answers to questions at the Grad Images website for graduate photos, www.gradimages.com or by calling 1-800-424-3686.

Diplomas

The Records and Registration Office will mail diplomas (unless the student has specified that it be held for pick-up) after grades have been received and recorded, which is usually in mid-February for Fall graduates. Diploma-related questions should be directed to UNM Records and Registration at 505-277-6310 or by email to degrees@unm.edu.