Minutes of the Engineering Advisory Council Meeting

NMSU College of Engineering October 21, 2022 New Mexico State University Las Cruces, New Mexico

Council Attendees Leonard Bloom Wesley Bruno Harold Foreman Patrick Garcia Debra Hicks Michael Johnson Richard Leza Wencil McClenahan Scott McLaughlin Manny Mora Mark Robertson Randy Rothschild Wayne Savage Bert Thomas Lisa Webster Frank Seidel

College Personnel Lakshmi Reddi, Dean Antonio Garcia, Associate Dean of Academics Jay Misra, Associate Dean of Research Patricia Sullivan, Associate Dean of Outreach and Recruitment Gabe Garcia. Assistant Dean of Student Success and Experiential Learning, Engineering Technology and Surveying Engineering Interim Department Head David Jauregui, Civil Engineering Department Head Hansuk Sohn, Industrial Engineering Interim Department Head Steven Stochaj, Electrical and Computer Engineering Department Head Joe Holles, Chemical and Materials Engineering Department Head Jay Frankel, Mechanical and Aerospace Engineering Department Head Linda Fresques, College Chief of Staff Patrick Knapp, Development Director Gaby Cisneros, Director, COE Operations Jimi Ickes, Director, Undergraduate Programs Sashidhar Chintalapati, Senior Database Analyst

Welcome

Council Vice Chair J. Patrick Garcia called the meeting to order and welcomed council members and guests. Introductions were made.

• February 2022 meeting minutes were approved.

Chancellor Dan Arvizu: State of the University

Chancellor Arvizu said NMSU is making online program offerings a priority and plans to double the number of such programs to 10,000 online students in two years. Online courses are part of the plan to provide NSU future financial security as we have low tuition and high aid levels. We can provide a better product at a lower cost than our online competitors. NMSU will request \$27 million from the legislature to support this endeavor as online courses are more expensive to produce.

Our research funding is up to \$120 million, and the number of grant proposals has increased, but we still need to increase funding from non-STEM disciplines to increase our R-1 status.

NMSU has joined a new athletic conference which will increase revenues. Athletics generates 79 percent of the university's revenues. NMSU football will be featured on major television sports broadcasts. The increased revenues support the other 16 athletics teams on campus. The NMSU brand will gain national attention and help to boost recruiting. Pistol Pete products bring more than \$100 million of year in revenue.

NMSU will request a \$150 million GO bond in 2023. The state is currently in a dynamic environment and it is expected that there may be a \$1.5 billion increase in the state coffers. Oil and gas will continue to pay dividends. Among the priorities to be pursued will support:

- Graduate students
- Library
- Physical infrastructure
- ICT and utility costs

The chancellor noted that NMSU is on the uptick in freshman enrollments this semester, which is happening across the board, however NMSU is increasing more than other schools indicating that we are meeting the needs of our demographic. We need to focus on retention, particularly for high-risk populations: low income, first generation and students with dependents.

Salaries will be the #1 priority and salary distribution is controlled by Santa Fe. NMSU is asking for a 10% salary increase. We are still behind salary levels of our peers. The NMSU administration is committed to performance-based salaries and hope to have some latitude in differentiation. This is a competitive disadvantage for attracting and keeping faculty and staff.

The 2022 election will include a GO Bond that will not require an increase in taxes. This will include \$22.5 million for a replacement for Thomas and Brown Hall; \$15.5 million for health and nursing; \$10.5 million for the New Mexico Department of Agriculture and funds for improvements and infrastructure for the Doña Ana and Grants branches.

Dean Lakshmi Reddi: State of the College (See attachment: State of the College Fall 2022) Dean Reddi presented the <u>College of Engineering 2022 Annual Progress Report.</u>

Highlights are the effort to reduce D/W/F grades which were at an all-time high and were tackled "brilliantly" resulting in a 6 percent drop. The college has worked to identify roadblocks and took steps to help students with math, one of the largest stumbling blocks. The Eloy Torrez Family Learning Communities added to this success, along with identifying at-risk students and offering real-time assistance. The college is working to offer math courses, through the College of Arts and Sciences, that will be taught in the context of engineering by engineering professors.

Last year the college research expenditures increased by 50 percent, with all departments doing well. Several big-ticket proposals are in the pipeline.

Extension and outreach activities are gaining momentum following COVID's campus closure. Gabe Garcia is director of the Capstone Program and there are now 20 industries that have sponsored projects. This collaboration with industry provides a rich and unique learning environment for our students.

Dr. Satyajayant "Jay Misra": State of Engineering Research (See attachment: State of Research Fall 2022) Dr. Misra was named associate dean of research in July 2022. He was formerly a professor in the NMSU Computer Science Department. He reviewed the current status of engineering research and said that the college was doing well.

His goals are:

- Double college's funding to \$26 million/yr by 2027.
- Reach median expenditure of \$340K/yr per faculty by 2027.
- By 2025, NMSU leading two funded ERC Centers and creating a research institute.
- Top 50 public university engineering programs in NSF Higher Education Research and Development Survey by 2032.
- Rank in top 100 engineering programs, US News, by 2027.
- Have 10 professional society fellows across the college by 2032.

Aggies Without Limits

- Vladimir Avina, Senior Media Specialist, show two videos from the AWL trip to Honduras this past summer.
 - o Thank you AWL
 - o Aggies Without Limits Trailer Puente De Diamantes
- Emilia Mandujano, Civil Engineering Technology Student, President of AWL, gave a presentation about AWL. (See attachment: Aggies Without Limits Fall 2022)
- Tax deductible donations may be made to:
 - <u>https://www.paypal.com/donate?token=GZTRbZMzhCOdmKmgO6pnmd0G5LE</u> <u>tKlcYstxfNcfqPvmyiPFjxMChwHaisXdSBTpLD0pzjODryG5T1279</u>
 - Checks made out to AWL and sent to AWL, Dept. of Engineering Technology and Surveying Engineering, MSC 3566, NMSU, Las Cruces, NM 88003
 - o <u>https://nmsufoundation.org/givenow/giving-engineering.html</u>

Breakout Sessions

Seidel Leadership Institute Discussion

Student fellows participating in the Seidel Engineering Leadership Institute had the opportunity to ask questions and converse with council members.

Professional Master's Programs (See attachment: Professional Master's Program Discussion Notes Fall 2022)

Entrepreneurship (See attachment: Entrepreneurship Discussion Notes Fall 2022)

Action Items

- ⇒ Linda to send link to <u>College of Engineering 2022 Annual Progress Report.</u>
- ⇒ Linda to send phone numbers and email addresses of Seidel breakout session participants to attending students. Done