CLASS OF 2026

Outstanding Graduate

“I hope to empower disadvantaged Borderlands students pursuing a STEM education in the same way I was generously supported.”

THARWAT ELKABANI

Graduate School, Master’s

Tharwat Elkabani ’24 is graduating with a Master of Science in Mechanical Engineering.

Born in Las Cruces, Tharwat spent his childhood in Egypt and Lebanon, returning to Las Cruces for his senior year of high school. As an NMSU undergraduate, he received bachelor’s degrees in both Mechanical and Aerospace Engineering with a minor in Physics.

Dr. Abdessattar Abdelkefi encouraged him to continue for a graduate degree: “From our first meeting [in 2021] . . . it was clear that Tharwat possessed remarkable creativity, technical aptitude, and intellectual curiosity. He consistently seeks out challenging research problems and dedicates himself to learning.”

Through experimental vibration testing, Tharwat studied the nonlinear dynamics of bolted joint structures to qualify the effectiveness of bolted connections in industrial applications; for example, ensuring planes are mechanically safe to fly. He already has four publications in conference proceedings and two journal articles under review for which he is first author.

Since 2022, he has been a research assistant for the NMSU Nonlinear Dynamics and Energy Harvesting Laboratory, participating in the Department of Defense Classified Ready Employee Workforce program, which prepares students for careers in national security. He also was a research fellow at Los Alamos National Laboratory (LANL).

However, Tharwat’s proudest achievement was his Capstone project, for which he served as lead test engineer. His team competed in LANL’s “Environmentally Robust Roll Switch” design challenge, winning the “Best Overall Design Award in Engineering” from College of Engineering faculty. Tharwat represented NMSU and their project at the 2024 Capstone Design Conference in Tennessee.

In his spare time, Tharwat plays soccer, tennis, guitar, and pinball. Upon graduation, he will be employed in the Product Realization and Reliability Office under the Pit Technologies Division at LANL, working to improve plutonium pit manufacturing processes. ▲