

Mechanical Engineering Seminar Series

October 21st, 2025, 11:00AM

Student Services East, Room 1401

Title: Engineering the Future: Empowering the Next Generation with Simulation in Ansys

Dr. Hesam Moghaddam
Ansys

Abstract: Engineering is evolving at a pace where traditional trial-and-error approaches are no longer sufficient to meet the demands of innovation, efficiency, and sustainability. Simulation is now a cornerstone of modern engineering practice, enabling students and professionals to design, test, and optimize ideas in a virtual environment before building physical prototypes. In this talk, we will explore how Ansys simulation tools empower the next generation of mechanical engineers to bridge the gap between theory and practice, strengthen problem-solving skills, and prepare for real-world challenges. Through examples spanning education and industry applications, we will highlight how simulation fosters innovation, accelerates learning, and equips students with the skills needed to engineer the future.

Brief Bio: Dr. Hesam Moghaddam is an Academic Development Manager II at Ansys (Part of Synopsys), with over 10 years of experience in engineering education, curriculum development, strategic business development, and project management. He specializes in aligning academic programs with industry needs, driving educational innovation, and enhancing the adoption of engineering tools and technologies. His expertise includes leading cross-functional teams, developing workforce programs, and managing complex projects in collaboration with academic and industry stakeholders.

Dr. Moghaddam has held key positions at Northern Arizona University, where he developed workforce programs and worked with industry leaders to integrate cutting-edge engineering tools into curricula. Prior to that, he served as a faculty member and Associate Chair of the Mechanical Engineering Department for over five years. Additionally, he worked as an Education Business Development Manager at Microsoft, leading a high-performing sales team and supporting academic institutions in adopting digital tools to enhance educational outcomes.

Dr. Moghaddam holds a Ph.D. in Mechanical Engineering and has extensive expertise in engineering simulation with Ansys, designing innovative engineering curricula, and developing business strategies. He is passionate about fostering partnerships and building programs that bridge the gap between education and industry, ensuring student success. A firm believer in growth mindset and positive impact, Dr. Moghaddam actively welcomes challenges and initiatives that push him to grow and innovate.