

Mechanical and Measurement & Control Engineering

Chair and Associate Professor: Sebastian

Professors: Schoen, Bosworth

Associate Professor: Sebastian

Assistant Professor: Mahamud

Senior Lecturer: Hofle, Wilson

Affiliate Faculty: Perez, Lavu, Lin, Maidana, Potluri

Emeritus Faculty: Williams

| Program Description | Type | Degree |
|--|--------|--------|
| Doctor of Philosophy in Engineering and Applied Science (MMCE) (https://coursecat.isu.edu/graduate/scienceengineering/engineeringandappliedscience/dopengineeringandappliedscience/mecheng/eas/) | Degree | Ph.D. |
| Master of Science in Measurement and Control Engineering (https://coursecat.isu.edu/graduate/scienceengineering/electrical-and-computer-engineering/msmeasurementcontrol/) | Degree | M.S. |
| Master of Science in Mechanical Engineering (https://coursecat.isu.edu/graduate/scienceengineering/mechanicalengineering/msmechanicalengineering/) | Degree | M.S. |
| Accelerated BS/MS Program in Mechanical Engineering (https://coursecat.isu.edu/graduate/scienceengineering/mechanicalengineering/bmsme/) | Degree | BS/MS |

- Enhance the ability of graduates to effectively communicate these concepts both in oral and written formats.

Master of Science in Mechanical Engineering

The master's degree program in Mechanical Engineering is designed to provide advanced study (analytically, computationally, and experimentally) in thermodynamics, fluids, heat transfer, energy systems, vibrations, engineering mechanics, and their associated measurement systems. This program prepares the student for advanced placement in the mechanical engineering field in industry, research, or development areas. Additionally, this program provides a suitable base for entrance into a doctoral program in a field related to Mechanical Engineering. The program is offered both at the Pocatello and Idaho Falls campuses, primarily through the use of telecommunications/distance learning, which includes partial in-class instruction.

Goals

- Enhance the knowledge of graduates in advanced concepts of thermodynamics, fluids, heat transfer, energy systems, vibrations, engineering mechanics, measurements, and engineering mathematics.
- Increase the ability of graduates to synthesize and apply these advanced concepts to develop realistic mechanical engineering designs implementing them safely, ethically, and effectively.
- Enhance the ability of graduates to effectively communicate these concepts both in oral and written forms.

Master of Science in Measurement and Control Engineering

The master's degree program in Measurement and Control Engineering is designed to provide advanced study (analytically, computationally, and experimentally) in measurements, modeling, simulation, robotics, and adaptive, intelligent, nonlinear, optimal, and robust control. This program prepares the student for advanced placement in the measurement and control engineering field in industry, research, or development areas. Additionally, this program provides a suitable base for entrance into a doctoral program in a field related to electrical or mechanical engineering. The program is offered both at the Pocatello and the Idaho Falls campuses, primarily through the use of telecommunications/distance learning, which includes partial in-class instruction.

Goals

- Enhance the knowledge of graduates in advanced concepts of measurement, control, signal processing, engineering mathematics, computation and other related areas.
- Increase the ability of graduates to synthesize and apply these advanced concepts to develop realistic measurement and control engineering designs and to solve identified problems, designing strategies for implementing them safely, ethically, and effectively.