

## DEGREES OFFERED

B.S., M.S. AND PH.D. IN MECHANICAL ENGINEERING

### Bachelor of Science in Mechanical Engineering

➤ Intensive undergraduate hands-on experience through a 5-course design sequence, laboratory

courses, and capstone design experience.

➤ Areas of study: Thermal and fluid sciences and engineering, dynamic systems and control, materials and engineering mechanics,

micro-fabrication and design, renewable energy, biomechanics, and aerospace systems.



### Master of Science in Mechanical Engineering

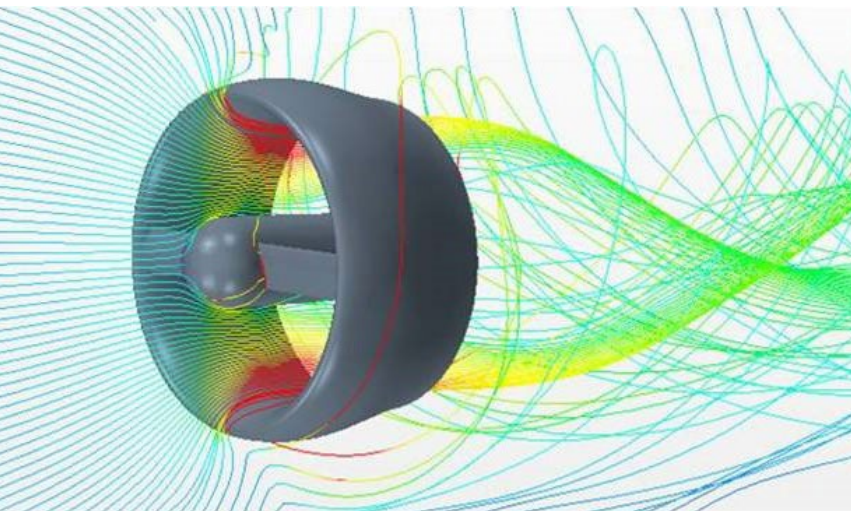
- Plan I (Thesis Option)
- Plan II (Project Option)
- Plan III (Coursework Only)

### Ph.D. in Engineering, Concentration in Mechanical Engineering

## RESEARCH AREAS

- Renewable energy integration and power transmission
- Solar, wind and ocean energy
- Management and control of distributed energy systems and microgrid
- Building energy performance
- Dynamics and controls of complex dynamical networks
- Thermal control of space vehicles
- Computational fluid dynamics and turbulence flows

- Hydrodynamic instabilities; multiphase flows; shock-accelerated flows, advanced flow field measurement techniques
- High-performance computing
- Design, fabrication and characterization of MEMS and nano devices
- Additive manufacturing
- Composite materials, smart materials, thin films, and nanostructured materials
- Materials for energy storage and conversion
- Mechanical integrity of microelectronic devices and packages
- Biomechanics
- Multi-scale mechanics of materials
- Spacecraft dynamics, maneuvers, guidance, navigation, and control
- Modeling and simulation of race car performance
- Robotics and autonomous systems
- Aerospace science and engineering





## Earn an M.S. online in space systems engineering

The Department of Mechanical Engineering offers a fully-online master's program in space systems engineering, leading to a master of science in mechanical engineering. This program is one of the first master's-level space systems engineering programs in the country. The space systems engineering concentration was developed to provide graduates with the advanced skills to further their career in the aerospace industry.



All courses for the space systems engineering program are offered in an eight-week format.

For program details, visit <http://mespaceonline.unm.edu>



## Undergraduate design experience

In addition to the Formula Society of Automotive Engineers race car program, mechanical engineering students can choose from two other specialized senior design options: the Lobo Launch rocket and the Solar Splash boat, in addition to more traditional senior design projects.

The three specialized programs participate in national competitions each year, which combine technical knowledge with real-world, project-based engineering experience that employers desire.

## Contact us

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Check out our website  
for the latest news

[me.unm.edu](http://me.unm.edu)

