Energy Systems Engineering (M.S. or M.Eng.)

UND is a world leader in energy-related research and education.

If you want to be on the forefront of one of the most exciting and growing engineering disciplines, a career in energy engineering might be right for you. At UND, you'll benefit from one of the strongest energy research programs you can find anywhere.

Program Snapshot
- Program type: Master's Degree
- Format: On-campus or online
- Est. time to complete: 1-2 years
- Credit hours: 30

Why Earn a Master's Degree in Energy Systems Engineering at UND?

Energy system expertise is needed to effectively address some of today's hottest societal issues, such as climate change, rising energy costs and security issues. The future of sustainability and alternative energy relies on those with the education to solve a global shortage of energy. You'll quickly be in demand by earning your master's degree either online or on-campus from the University of North Dakota.

Top Ranked in Energy Research and Education

UND is a world leader in energy-related research and education. We are recognized by U.S. News & World Report as a top online graduate engineering program. You'll benefit from a strong energy systems engineering graduate program that will help you:

- Attain the design expertise today's global energy companies value, along with the ability to solve complex sustainable energy engineering problems.
- Become a proficient energy researcher, and participate in projects and experiential learning in areas of sustainable energy engineering.
- Get a broad-based education on integrating systems to allow the environmentally acceptable use of coal; renewable fuels and chemicals; the absorption and conversion of solar energy; the absorption and conversion of wind energy; geothermal energy conversion; hydrogen production, storage, distribution, and utilization; and other technologies.

M.S. vs. M.Eng. in Energy Systems Engineering

UND offers both Energy Systems Master of Science (M.S.) and Master of Engineering (M.Eng.) degrees. It is recommended you connect with the your advisor before making a final decision. However, in general, a M.Eng. program is more course-based, while the more popular M.S. program includes a thesis or research project/independent study.

Application Deadlines

FALL: AUG 1
SPRING: DEC 1
SUMMER: MAY 1
Energy Systems Engineering at UND

- Develop a broad background in the technical, economic and societal factors needed to develop sustainable energy.
- Conduct research and development activities in sustainable energy fields, or pursue advanced studies in technologies that will provide sustainable sources of energy in the future.
- Participate in research conducted with the Institute for Energy Studies (IES), the Petroleum Research, Education & Entrepreneurship Center of Excellence (PREEC), or in collaboration with the Energy & Environmental Research Center.
- Customize your curriculum to meet your areas of interest, with an emphasis on sustainable energy engineering design.
- Gain the practical experience you need to succeed in a variety of energy-focused areas in top companies around the world.
- Flexible research topics allow online students to choose projects aligned with their company’s needs.

Careers in Energy Systems Engineering

68K
Median salary for an energy engineer*

25%
The top 25% in this field make a median salary of $77,000, not including potential bonuses, profit-sharing and commission benefits

*U.S. Bureau of Labor Statistics

A master's degree in energy systems engineering from UND can make you a very attractive candidate at today's biggest energy and energy-related companies in the world.

UND graduates can expect a range of job and occupations available to them. Many engineering graduates have gone onto careers in top regional and global energy firms. Some typical jobs related to the energy engineering master's degree include:

- Energy systems engineer
- Solar/renewable energy engineer
- Mechanical engineer (energy)
- Alternative energy system engineer
- Power systems engineer
- Energy management engineer