



[PhD/MS/BS in Building Construction](#)

The Building Construction program at the University of Florida prepares graduates for exciting careers in the construction industry. The core curriculum includes a mix of technical, managerial, and business courses. Graduates receive a comprehensive education including theory and practical applications, and they are fully prepared for their responsibilities in the construction. Courses are offered leading to the Bachelor of Science in Building Construction, the Master of Building Construction or Master of Science in Building Construction, and the Doctor of Philosophy degree.

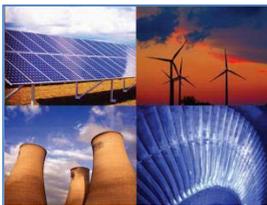
[University of Florida MS/BS in Nuclear Engineering](#)



In the State of Florida, there are five nuclear power plants which generate 17.5% of the electricity in the State. Including the Florida's reactors, there are 103 reactors in the United States. These reactors supply ~20% of the US electricity needs. Majority of the US electrical utilities intend to extend the life of their nuclear plants by 20 years, and there are discussions on the possibility of 40-year extension. The need for the nuclear power is expected to increase because of the increasing need for electricity, reducing supply of

oil and gas, and the need for reduction of waste and releases such as CO₂. The use of radiation in non-power applications such as medicine is growing rapidly, and new uses especially in the areas of detection for homeland security are being explored. [The Nuclear Energy Institute \(NEI\)](#) predicts a significant shortage in the number of nuclear scientist and engineers needed in both commercial and government sectors of nuclear industry.

The University of Florida Training Reactor was commissioned in 1959 as part of President Dwight D. Eisenhower's Atoms for Peace program, and today it is one of the five oldest university research reactors still licensed. Follow this [link for updated information](#) about UF's important role in training the next generation of nuclear scientists and power plant operators.



[Department of Mechanical and Aerospace Engineering – Energy Certificate](#)

This online certificate is designed for engineers and scientists to continue their education through graduate certification in Energy; with specialization available in: Solar Energy, Wind Turbines, Gas Turbines, or Energy Management.



[Department of Environmental Engineering Sciences – Sustainable Engineering Certificate](#)

This certificate program is designed for engineering and science professionals interested in expanding their professional qualifications. Course offerings include Green Engineering Design and Sustainability, Principles of Industrial Energy, and Materials and Sustainability.

Program for Resource Efficient Communities

[Continuing Education](#)

The Program for Resource Efficient Communities integrates and applies the University of Florida's educational and analytical assets to promote the adoption of best design, construction, and management practices that *measurably* reduce energy and water consumption and environmental degradation in new residential community developments.

[Public Utility Research Center \(PURC\) Training Program on Utility Regulation and Strategy](#)

The Public Utility Research Center has developed the PURC Advanced International Practices Program in consultation with faculty and alumni of the PURC/World Bank International Training Program on Utility Regulation and Strategy. This new program, and its first three courses, will provide experienced utility professionals with a comprehensive understanding of the technical matters of infrastructure policy.

Program participants will develop the skills they need to address today's complex infrastructure issues. Using case studies and presentations by PURC faculty and infrastructure experts, the courses in this program will emphasize practical lessons and new techniques for addressing the most pressing pricing, market, and process issues. See the attached PDF for details.



[Center for Manufacturing Innovation \(CMI\)](#)

Manufacturing at UF focuses on performing state-of-the-art research to produce innovative manufacturing and surface technologies. These technologies enable improved product performance and breakthroughs in water, food production, energy, aerospace, and healthcare systems. Students from the high school to graduate levels are trained to have strong analytical/computational modeling capabilities coupled with sound experimental techniques and data analysis skills.

While the historical focus has been macro-scale manufacturing applications, with the addition of new faculty and facilities, new activities at the micro- and nano-scale are underway. Current research areas include:

- 3D printing with applications to human tissue fabrication
- magnetic field-assisted finishing
- micro- and nano-manufacturing
- high-performance machining of advanced materials
- modeling and sensing of machining processes

As you browse our site, we look forward to receiving your feedback, answering your questions, and learning how we can work together to improve global manufacturing capabilities.