



Department of Civil and Environmental Engineering
Assistant/Associate/Full Professor
Nuclear Engineering

The University of Utah's Nuclear Engineering Program (UNEP) invites applications to immediately fill two full-time, tenure-track faculty positions in Nuclear Engineering with an anticipated start date of August 1, 2025. One of the positions is to be filled at the Assistant Professor level, and the other is open rank. Full and Associate Professor level applicants may be considered for the Energy Solutions Presidential Endowment. These positions are part of the University of Utah's 2024 initiative to grow the Nuclear Engineering Program.

UNEP is housed in the University of Utah's Civil and Environmental Engineering Department (CVEEN) with four current tenure-track faculty lines augmented by affiliated faculty from other departments from the College of Engineering, College of Science, and School of Medicine. UNEP maintains strong collaborations with U.S. national laboratories, industry, and universities around the world. UNEP offers an undergraduate minor, M.S., and Ph.D. degrees. UNEP maintains an NRC-licensed 100 kW Modified Mark I TRIGA Reactor with newly upgraded controls, cooling, and monitoring systems, as well as laboratory facilities to enable advanced nuclear research, in addition to state-of-the-art laboratories for radiochemistry, radiation detection and measurement, optical microscopy, nuclear medicine, nuclear forensics, and neutron activation analysis. UNEP faculty also have access to world-class user facilities at the University of Utah, including the Nanofab facility for materials characterization. The university is licensed by the state of Utah to perform research within its laboratories with a wide range of radioactive materials. Research opportunities span a broad range of topics, including nuclear safety and forensics, power, nuclear fuel storage and disposal, nuclear fuel cycle, nuclear materials, nuclear detection, nuclear medicine, advanced numerical modeling, simulation and visualization, signal processing, and fundamental nuclear physics.

Position Description – Hired applicants will be expected to develop an externally-funded research program, mentor undergraduate and graduate students, produce scholarly publications, collaborate with other faculty on professional development interests, and provide departmental, college, and university service. They will be required to teach undergraduate and graduate courses in nuclear engineering. An earned Ph.D. degree in Nuclear Engineering or a closely related discipline (before the date of hire) is required. Strong communication skills and the ability to work collegially and collaboratively with diverse internal and external constituencies are also expected.

UNEP invites applications with one or more of the following areas of expertise: nuclear reactor physics and radiation transport methods/analysis; nuclear reactor kinetics; nuclear fuel cycles for conventional and advanced nuclear energy systems; nuclear fusion science and technology; nuclear systems analysis and optimization; development, testing, evaluation, and performance assessment of advanced nuclear fuels, alloys, molten salts, and materials for harsh

environments and advanced nuclear systems; nuclear monitoring, and imaging methods; non-proliferation technologies and nuclear forensics; nuclear reactor cyberinfrastructure and development of digital twins, advanced artificial intelligence and deep learning techniques in nuclear applications; power engineering informatics related to intelligent and sustainable systems, health physics, nuclear physics, radiochemistry or dosimetry.

Candidates with strong core fundamentals that allow them to work across multidisciplinary areas are particularly encouraged to apply. We seek highly motivated team players who want to help advance our nuclear engineering program.

Part of the Big 12 Conference, the University of Utah is an R1 university located in Salt Lake City at the foothills of the beautiful Wasatch Mountains. Founded in 1850, the University of Utah now enrolls over 32,000 undergraduate and graduate students. The area experiences the four seasons and is known for world-class outdoor recreational activities including skiing, hiking, and biking. The State of Utah has more national parks and scenic areas than any other state. Growth in transportation, energy, mining, software, semiconductors, finance, education, healthcare, and business job sectors have contributed to the State's prosperity, despite the challenging national economy. US News and World Report ranks Utah as the Best State to Live In (2024) and the Wall Street Journal ranks University of Utah #1 Public University in the West (2024).

The CVEEN department is one of seven rapidly growing departments within the John and Marcia Price College of Engineering. In the past decade, the number of tenure-track faculty positions has grown by 50%, and research expenditures have more than tripled to \$81.5 million per year, placing our College in the top 30 engineering universities in the country for research volume (2022). The CVEEN Department currently has 21 tenure track faculty members and three lecturing faculty, plus we are actively searching for four positions, including these vacancies. The department has an active research program with over \$19 million in external funding in 2023. Additional information about the Department is available at: www.civil.utah.edu.

Application Process – Electronic application materials (pdf format) should include a cover letter, curriculum vitae, statement of research interests, statement of teaching interests, up to three (3) relevant publications, and contact information for three references. Applications should be submitted online at <https://utah.peopleadmin.com/postings/171469>. Initial screening of applicants will begin December 2, 2024, although applications will be accepted and reviewed until the position is closed.

The University of Utah is an Equal Opportunity/Affirmative Action employer and educator. Veteran's preference. Reasonable accommodations are provided. For additional information: <http://www.regulations.utah.edu/humanResources/5-106.html>.