



NUCLEAR ENGINEERING AND RADIOLOGICAL SCIENCES

TOP INDUSTRIES

1. Utilities
2. Research & National Laboratory
3. Healthcare
4. Government/Military
5. Technology Hardware & Equipment

SAMPLE JOB TITLES

- Criticality Engineer
- Fuel Rod Design Engineer
- Neutronics Analyst
- Nuclear Engineer
- Nuclear Software Engineer
- Physicist I - Health Physics
- Physics Quality Coordinator
- Plant Integration Engineer
- Postbac Researcher
- Reactor Engineer
- Reliability Engineer

TOP HIRING COMPANIES



SAMPLE HIRING COMPANIES

- BlackEdge Capital
- DTE Energy
- Entergy
- Exelon
- General Electric
- Idaho National Laboratory
- Kairos Power
- Lawrence Livermore National Lab
- Memorial Sloan Kettering Cancer Center
- Michigan Medicine
- Naval Nuclear Laboratory
- Niowave
- QQ Max Services
- Tennessee Valley Authority
- Talen Energy
- Tetra Tech
- U.S. Nuclear Regulatory Commission
- University of Michigan
- Verus Research
- Walter Reed Army Institute of Research
- X-energy

FULL TIME
STARTING
ANNUAL
SALARY

Average
\$77,603

Min \$69,620 Med \$74,000 Max \$95,000

INTERN
HOURLY
SALARY

Average
\$29.19

Min \$27 Med \$29.88 Max \$30

Intern Hourly Salary data is from Academic Year (AY) 2024.

All other data are from AY 2021-2024.

Data is subject to availability. At least 4 data points are required to publish salary data.

Visit career.engin.umich.edu/career/salary-info for more comprehensive data.

career.engin.umich.edu

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SAMPLE ELEVATOR PITCH

Hi, I'm [NAME] and I'm a [YEAR] studying Nuclear Engineering and Radiological Sciences. I am seeking an full-time position as a health physics engineer.

Last summer I interned at Los Alamos National Laboratory where I analyzed the radiation impact of nuclear power plants on residents in nearby cities. Additionally, I am part of the Society of Women Engineers where I host an engineering summer camp for high school students exploring engineering.

I am passionate about finding solutions to technical challenges and leading others, which has equipped me with the necessary skills to excel in a position at your company. Could you tell me more about the role?

SAMPLE IMPACT STATEMENT

Before: Decreased emissions from a reactor power plant

After: Developed a new carbon-sequestration program that stores and refines carbon in a tank which can be used for other tasks reducing carbon emissions by 10%

KEY SKILLS

- Computational Modeling & Simulation
- Scientific Programming (MATLAB/Python)
- Nuclear Safety Analysis
- Mathematical & Statistical Modeling
- Design and Data Analysis

KEY COURSES

NERS 315: Nuclear Instrumentation Laboratory; introduction to the devices and techniques most common in nuclear measurements

NERS 320: Applied Mathematics for Engineering Physics; mathematical applications of fluid mechanics, heat transfer, electromagnetism, quantum mechanics, medical physics, radiological engineering, nuclear reactor physics, radiation transport, and reliability analysis

NERS 441: Nuclear Reactor Theory I; introduction to the theory of nuclear fission reactors

NERS 491/492: Senior Design I/II; student teams complete a year-long senior design project

SAMPLE EXTRACURRICULARS

Student Organizations: American Nuclear Society, Institute of Nuclear Materials Management, Women in Nuclear (WIN), Alpha Nu Sigma Society, Health Physics Society (HPS)

QUESTIONS?

Want to learn more information?

Contact us at: ecrc-info@umich.edu

Schedule an appointment: careerforge.com/login