# **NUCLEAR ENG &** IOLOGICAL SCI

#### TOP INDUSTRIES 2020-2022

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

## SAMPLE JOB TITLES

- Client Systems Engr.
- Front End Associate
- Health Physics Consultant
- Nuclear Design Engineer
- Nuclear Engineer
- Nuclear Operator

- Nuclear Software Engr.
- Physicist
- Plant Integration Engineer
- Reactor Engineer
- Rotational Engineer
- Test Operations Engr.







# SAMPLE HIRING COMPANIES

- Bechtel
- BlackEdge Capital
- City of Escanaba, MI
- Delta Air Lines
- DTE Energy
- Electric Power Research Institute - EPRI
- Entergy
- Epic
- Fxelon
- FΥ
- General Electric
- Huntington Ingalls

- Kairos Power
- KAIST, School of Computing
- Los Alamos National Laboratory
- MAC Valves
- Naval Nuclear Lab
- NAVSFA
- Niowaye
- 00 Max Services
- Shanghai Nuclear Engineering Research • Westinghouse Electric and Design Institute

- Stan A. Huber Consultants
- Tennessee Vallev Authority
- Tetra Tech
- U.S. Air Force
- University of Michigan
- Verus Research
- Wade Trim Group
- Walter Reed Army Institute of Research
- X-energy

### **FULL TIME** ANNUAL SALARY 2016-2017

Average: \$72,175

Min \$65.000 **Median** \$66.850

Max \$90.000

# INTERN 2021-2022

Average: \$4,582

Min \$3,640 **Median** 

Max \$6,630

Data is subject to availability. At least 4 data points are required to publish salary data. The most recent hiring data is published above. Visit care<u>er.engin.umich.edu/career/salary-info</u> for more comprehensive data.



# BACHELORS NUCLEAR ENG & RADIOLOGICAL SCI

### SAMPLE ELEVATOR PITCH

Hi, I'm [NAME] and I'm a senior 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 COURSES**

**NERS 315** - Nuclear Instrumentation Laboratory: an 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

### **KEY SKILLS**

- Computational Modeling & Simulation
- Scientific Programming (MATLAB/Python)
- Nuclear Safety Analysis

- Mathematical & Statistical Modeling
- Design and Data Analysis

### **SAMPLE EXTRACURRICULARS**

American Nuclear Society
Alpha Nu Sigma Society

Institute of Nuclear Materials Management Health Physics Society (HPS)

Women in Nuclear (WIN)

