## Self-Assessment for Careers

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March 23, 2020

- 1. What is the overall field for the career in which you are interested? Engineering
- 2. What is the specific career you would like to research? Nuclear Physicist & Engineer
- 3. The nature of the work What specific activities or tasks does a person in this job typically have to do on a daily basis?

"Nuclear physicists study the way atoms interact with each other, as well as how the characteristics of the nuclear world can be applied to human endeavors. Nuclear physicists may focus on one of several subspecialties including theoretical work, experimental examinations of nuclear particles and equipment design." The most concise way to describe a Nuclear Physicist's work is as follows: a Nuclear Physicist takes known theories, both scientific and mathematical, and applies those theories, possibly in conjunction with his or her own, to expand the field of Nuclear Science.

4. Cite The Source:

How to Become a Nuclear Physicist<sup>1</sup>

 $<sup>^1\</sup>mathrm{You}$  can click on citations to go to them

5.	Working conditions – This refers to such things as the type of work environment, the location of the work, and the physical requirements of the job.
	<ul> <li>■ Indoors</li> <li>□ Outdoors</li> <li>□ Combination of indoors and outdoors</li> <li>□ Work alone</li> <li>■ Work as part of a team</li> <li>□ Combination of alone and as part of a team</li> <li>■ Travel</li> <li>□ No travel</li> <li>□ Primarily standing</li> <li>□ Primarily sitting</li> <li>■ Combination of sitting and standing</li> <li>■ Computer work</li> </ul>
6.	Cite The Source: How to Become a Nuclear Physicist
7.	Where would a person in this career most likely be employed?
	<ul> <li>■ Private, small business/office</li> <li>□ Public, large corporation/business/office</li> <li>■ Public institution</li> <li>■ Government Agency</li> <li>□ Large cities</li> <li>□ Any town or city</li> <li>■ Specific cities</li> <li>■ May rotate within the United States or overseas, as needed.</li> <li>■ Other Power Plant</li> </ul>
8.	Cite The Source: How to Become a Nuclear Physicist
9.	Necessary education for this position — Would a candidate for this career need a degree? Or, does the career call for specialty vocational training?  Associate's Degree  Bachelor's Degree  Master's Degree  Doctoral Degree/Doctorate  Specialty Vocational Training and Certificate  Military Training  Other:

10.	In addition to a degree/training, would this career require a special certification or a credential?  Certification  Credential  License  No certification, credential, or license required  Other:
11.	Would you have to pass any state licensing tests, such as a state Bar Examfor lawyers?  State Test required  Internship required  Residency required  Apprenticeship required  None of these appear to be necessary  Other: Clearance, if in a government position
12.	Cite The Source: What is Nuclear Physics?
13.	What is the annual, median salary for this particular career? \$107,600
14.	Cite The Source: Nuclear Engineers — Occupation Profile
15.	According to the Occupational Outlook Handbook, what is the career outlook (projected growth) for this career 10 years from now? -1%
16.	Cite The Source: Nuclear Engineers — Occupation Profile
17.	What special skills, knowledge, or abilities will a person in this career be expected to have? Knowledge of Analytical Geometry and Calculus in a 3 Dimensional Field, Ability to use computer mathematical-based software to run simulations, and extensive knowledge of atomic physics and fluid mechanics.
18.	Cite The Source: How to Become a Nuclear Physicist
19.	Additional Information

None

20. Cite the Source: None

## References

- [1] How to Become a Nuclear Physicist. Academic Invest. 2019. URL: https://www.academicinvest.com/science-careers/physics-careers/how-to-become-a-nuclear-physicist.
- [2] Nuclear Engineers Occupation Profile. Accessed 03/23/2020. 2018. URL: https://www.careeronestop.org/Toolkit/Careers/Occupations/occupation-profile.aspx?keyword=Nuclear%5C%20Engineers&onetcode=17216100&location=UNITED%5C%20STATES.
- [3] What is Nuclear Physics? CareerIgniter. 2014. URL: https://www.careerigniter.com/careers/nuclear-physicist/.