

NSF STUDENT INTERNSHIP – PROJECT FRAMEWORK FOR 2021-2022

NSF International protects and improves global human health. Manufacturers, regulators, and consumers look to us to facilitate the development of public health standards and provide certifications that help protect food, water, consumer products and the environment.

The above statement is taken directly from the NSF International website [NSF International | The Public Health and Safety Organization](#) The following statement summarizes the start and purpose of NSF International: “We have been dedicated to protecting and improving global human health since 1944. As a global, independent organization, our standards team facilitates development of public health standards, and our service teams test, audit and certify products and services. The NSF mark assures consumers, retailers and regulators that certified products have been rigorously tested to comply with all standard requirements. Separately, we offer customized training and education, risk management and consulting solutions.”

To achieve a more rewarding experience for the selected NSF student researcher, the faculty mentor, and an actionable conclusion for NSF we are providing a “knowledge to action” framework to guide the project design for the 2021/2022 academic year. This was developed from emails and a conversation with Derek DeLand the NSF representative overseeing this award.

Applications for this year’s award are due by December 10th, 2021. A change from the published notice is this award is open to both undergraduate and graduate level students. The student award winner will be announced on January 14, 2022. The student and their mentor will be invited to have a conversation with Derek DeLand (MPH, REHS/RS) of NSF to review the project ahead of starting the 8-week internship time. The project report is due by May 27, 2022.

The NSF award winner is awarded \$3,500 with half paid at the start of the project and the final portion paid upon submission of the completed report. The faculty mentor is awarded \$500 after completion of the project. The student award winner is expected to attend the NEHA AEC to make a platform presentation of their project. The award includes up to \$2,000 in registration, travel, lodging and meals to attend the 2022 AEC in Spokane, WA from June 28th to July 1st, 2022.

2021/2022 NSF Project Focus: On-site Wastewater System Standards

- Learn/Review NSF standards for wastewater systems.
- Identify components of wastewater systems which are NSF certified, filtration for example.
- Choose 1 state (either your home or school state) to be the focus of your project. Evaluate the subject state’s standards for wastewater systems.
 - Evaluate if NSF standards are referenced by name within the state standards.
 - Evaluate the last date the overall state level standards were updated.
 - Are the state level standards general or detailed?
- Evaluate how the state standard advises and intersects with the local jurisdictions within the subject state.
- Evaluate if the NSF standards are adopted independently at the local jurisdiction level.
- Determine the question(s) you will answer with your research.
 - Do NSF standards impact mandatory standards or optional optimizations of wastewater systems?
 - At the state level?
 - At the local level?
 - Are standards kept current for wastewater systems?

- At the state level?
 - At the local jurisdiction level?
 - Are NSF standards applied?
 - When was the state code last updated?
 - Is there a standard period for revision and update?
 - Are any updates expected in the near future?
 - Are there concerns the code is outdated with regard to contemporary treatment considerations, methodologies, technologies, etc.? If so, what are they?
 - What is the level of concern that onsite systems are adequately treating wastewater and protecting ground and surface water resources in the state or local jurisdiction?
 - Do onsite system regulations require periodic operation and maintenance (O&M)? If so, how often?
 - Is the requirement within the state level standards?
 - Is the requirement within the local jurisdiction level standards?
 - Are there emerging technologies for onsite wastewater systems?
 - Is NSF involved in certifying the emerging technology?
 - What issues are the emerging technologies addressing?
 - Is the state level public health authority aware? Are they pursuing standards to incorporate new technologies for onsite wastewater systems?
 - Can or should NSF facilitate the adoption of new on-site wastewater system technologies.
- Make actionable recommendations for NSF International within the conclusion of the report.

Below are some reference links to prepare your 2021/2022 NSF onsite wastewater project proposal and application.

<https://www.nsf.org/about-nsf>
<https://www.nsf.org/knowledge-library/what-is-third-party-certification>
<https://www.nsf.org/standards-development/standards-portfolio/water-wastewater-standards>
<https://www.nsf.org/testing/water/onsite-wastewater-systems/residential-wastewater-treatment-systems>

Links to NORWA (National Onsite Wastewater Recycling Association) and the EPA for some general resources. NORWA has by state onsite wastewater program information and contacts.

<https://www.nowra.org/>
<https://www.epa.gov/septic/state-septic-system-program-contacts>

REMEMBER Applications for the NSF award are due by December 10, 2021. For application information use this link [Student Research Competition and NSF International - Association of Environmental Health Academic Programs \(aehap.org\)](#)