

**Opportunity Title:** Air Force Institute of Technology (AFIT): Water Infrastructure Resiliency Internship  
**Opportunity Reference Code:** AFIT-2023-0001

**Organization** U.S. Department of Defense (DOD)

**Reference Code** AFIT-2023-0001

**How to Apply** Click on *Apply* at the bottom of the opportunity to start your application.

**Description** The Air Force Institute of Technology (AFIT), Department of Systems Engineering and Management is offering a post-bachelor's internship at Wright Patterson Air Force Base.

**What will I be doing?**

As an ORISE participant, you will join a community of scientists and researchers in an effort to evaluate biosensors for early detection of system failures in water treatment plants. The proposed research will examine biosensor signal responses during the early onset of disinfection failure due to power outages.

**Why should I apply?**

Under the guidance of a mentor, you will engage in a variety of research activities, including:

- Collecting data using modern chemical and microbiological techniques
- Carrying out statistical analysis
- Using software platforms
- Summarizing experimental findings using illustrations, including figures, and tables
- Explaining methodologies and results in oral and written form

**Where will I be located?** Dayton, Ohio

**What is the anticipated start date?**

Exact start dates will be determined at the time of selection and in coordination with the selected candidate. Applications are reviewed on an ongoing basis and internships will be filled as qualified candidates are identified.

**What is the appointment length?**

Appointments are initially for one year with the option to extend the appointment for up to four additional years, contingent upon project needs and funding availability.

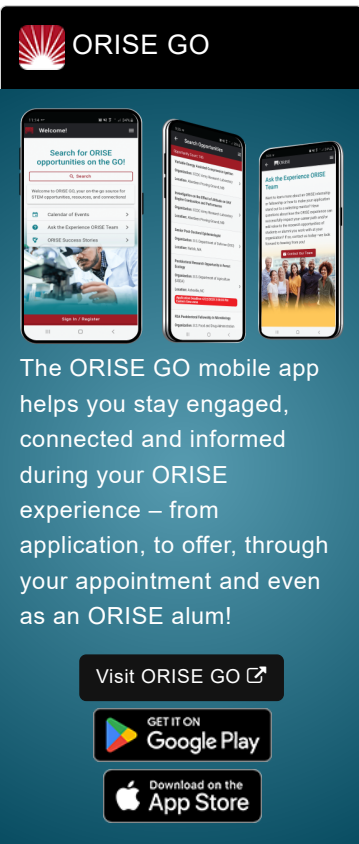
**What are the benefits?**

You will receive a stipend to be determined by AFIT. Stipends are typically based on a participant's academic standing, discipline, experience, and research facility location. Other benefits may include the following:

- Health Insurance Supplement (*Participants are eligible to purchase health insurance through ORISE*)
- Relocation Allowance
- Training and Travel Allowance

**About AFIT**

AFIT's mission is to help build America's airpower, by educating military and civilian Airmen to innovatively accomplish the Air Force's core missions, in support of joint operations, more effectively, efficiently, sustainably and affordably. We provide unique defense-focused, research-enabled, multi-disciplinary advanced academic education, as well as globally delivering career-



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long, action-based, functional professional continuing education, over a continuum of learning, on-command and on-demand. Our success is measured by the career-long contributions of our graduates, faculty and staff. AFIT accomplishes this mission through four schools: the Graduate School of Engineering and Management, the School of Systems and Logistics, the Civil Engineer School, and the School of Strategic Force Studies. To learn more about the research performed at AFIT, please visit [www.afit.edu](http://www.afit.edu).

**About ORISE**

This program, administered by Oak Ridge Associated Universities (ORAU) through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and DoD. Participants do not enter into an employee/employer relationship with ORISE, ORAU, DoD or any other office or agency. Instead, you will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE. For more information, visit the [ORISE Research Participation Program at the U.S. Department of Defense](#).

**Qualifications** The qualified candidate will hold a bachelor's degree in Environmental Engineering and Science, Environmental Microbiology, Molecular Biology, Environmental Public Health Science, or another similar field. The degree must have been received within 5 years of the appointment start date.

**Application Requirements**

A complete application consists of:






- Zintellect Profile
- Educational and Employment History
- Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Transcripts/Academic Records - Please upload a copy of a transcript for your current or most recent degree program that meets the disciplinary qualifications of the opportunity. [Click here for detailed information about acceptable transcripts](#).
- One Recommendation. Your application will be considered incomplete and will not be reviewed until one recommendation is submitted. We encourage you to contact your recommender(s) as soon as you start your application to ensure they are able to complete the recommendation form and to let them know to expect a message from Zintellect. Recommenders will be asked to rate your scientific capabilities, personal characteristics, and describe how they know you. You can always log back in to your Zintellect account and check the status of your application.

If you have questions, send an email to [AIRFORCE@orise.orau.gov](mailto:AIRFORCE@orise.orau.gov). Please list the reference code of this opportunity AFIT-2023-0001 in the subject line of the email. Please understand that ORISE does not review applications or select applicants; selections are made by the sponsoring agency identified on this opportunity. All application materials should be submitted via the "Apply" button at the bottom of this opportunity listing. Please do not send application materials to the email address above.

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| <b>Eligibility</b>  | <ul style="list-style-type: none"><li>• <b>Citizenship:</b> LPR or U.S. Citizen</li></ul>   |
| <b>Requirements</b> | <ul style="list-style-type: none"><li>• <b>Degree:</b> Bachelor's Degree received within the last 60 month(s).</li><li>• <b>Discipline(s):</b><ul style="list-style-type: none"><li>◦ <b>Chemistry and Materials Sciences</b> (<a href="#">1</a> )</li><li>◦ <b>Earth and Geosciences</b> (<a href="#">21</a> )</li><li>◦ <b>Engineering</b> (<a href="#">27</a> )</li><li>◦ <b>Environmental and Marine Sciences</b> (<a href="#">14</a> )</li><li>◦ <b>Life Health and Medical Sciences</b> (<a href="#">2</a> )</li></ul></li></ul> |