

**CONNECTING
THE DOTS TO
INNOVATION**

ERDC STUDENT PROGRAMS

Speler Montgomery
Talent Acquisition Program Manager
Directorate of Human Capital (DHC)

October 2024



U.S. ARMY



US Army Corps
of Engineers®



ERDC
ENGINEER RESEARCH & DEVELOPMENT CENTER





About Me – Speler Montgomery



❖ Education

- Mississippi College (2001)
- B.S. Mathematics
- Minor in Computer Science



❖ Career

- Contract Student at Waterways Experiment Station (WES), Structures Lab (1993-1997)
- WES/ERDC Contractor (1997-2001)
- Mathematician in the Survivability Engineering Branch, Geotechnical & Structures Laboratory (GSL) (2001 – 2014)
- Chief, Scientific Software Branch, Information Technology Laboratory (ITL) (2014 -2019)
- Human Capital Officer, ITL (Feb 2019 – Jan 2021)
- DHC, ERDC Talent Acquisition Program Manager (Jan 2021 – Present)



Student Programs, Recruiting, New Hires/Integration, STEM Outreach

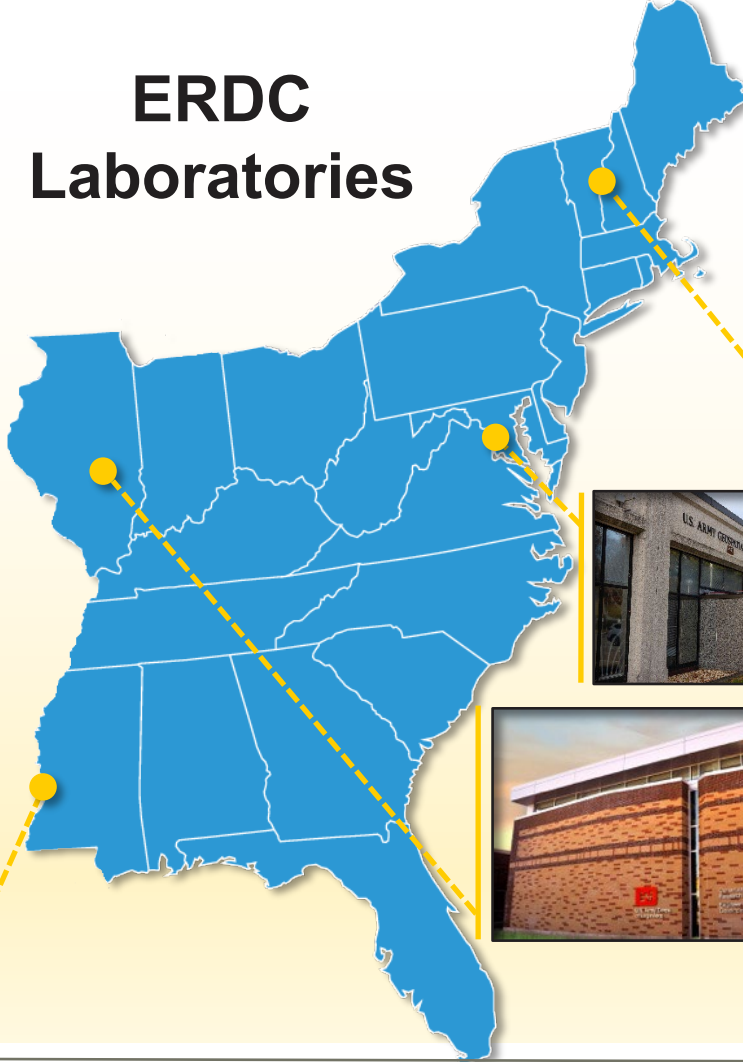




ERDC Overview

Seven Laboratories in States

ERDC Laboratories



ERDC Headquarters
Vicksburg,
Mississippi



Coastal and Hydraulics Laboratory (CHL)



Environmental Laboratory (EL)



Geotechnical and Structures Laboratory (GSL)



Information Technology Laboratory (ITL)



Cold Regions Research and Engineering Laboratory (CRREL)
Hanover, New Hampshire



Geospatial Research Laboratory (GRL)
Alexandria, Virginia



Construction Engineering Research Laboratory (CERL)
Champaign, Illinois

Field Offices

Permafrost Tunnel Research Facility
Fox, Alaska

Alaska Research Office
Fairbanks, Alaska

Lewisville Aquatic Ecosystem Research Facility
Lewisville, Texas

Contingency Base Integration Technology Evaluation Center (CBITEC)
Fort Leonard Wood, Missouri

Field Research Facility
Duck, North Carolina

Corbin Field Station
Woodford, Virginia

Extreme Exposure Station
Treat Island, Maine

ERDC International Research Office
London, England

A World-Class Research & Development Organization that Discovers, Develops and Delivers New Ways to Make the World Safer and Better Every Day



ERDC's Vision and Mission

It's All About Making the World Better and Safer



Our Vision

To be a **world-class** research and development partner delivering solutions not otherwise possible.

Our Mission

We **discover, develop and deliver** trusted engineering and scientific solutions for the warfighter and the Nation.



ERDC's People are Our Greatest Strength

Highly Qualified, Highly Motivated to Solve Complex Challenges



Civilian FTE Employees

2,617*

Engineers & Scientists (E&S)

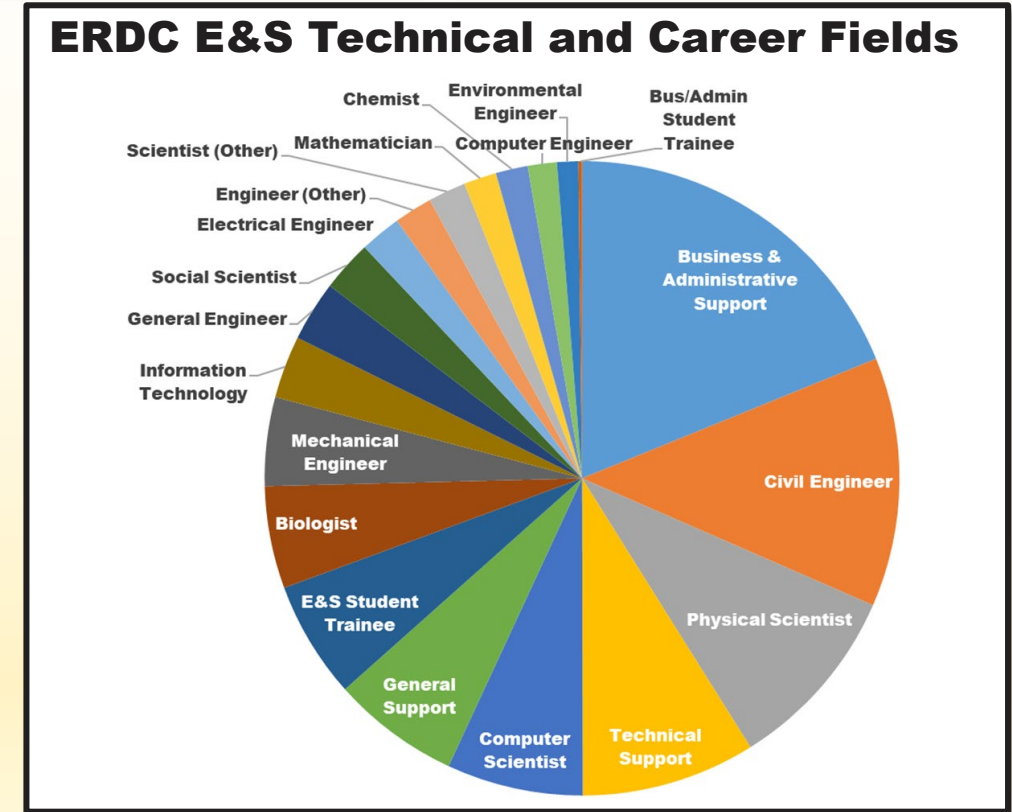
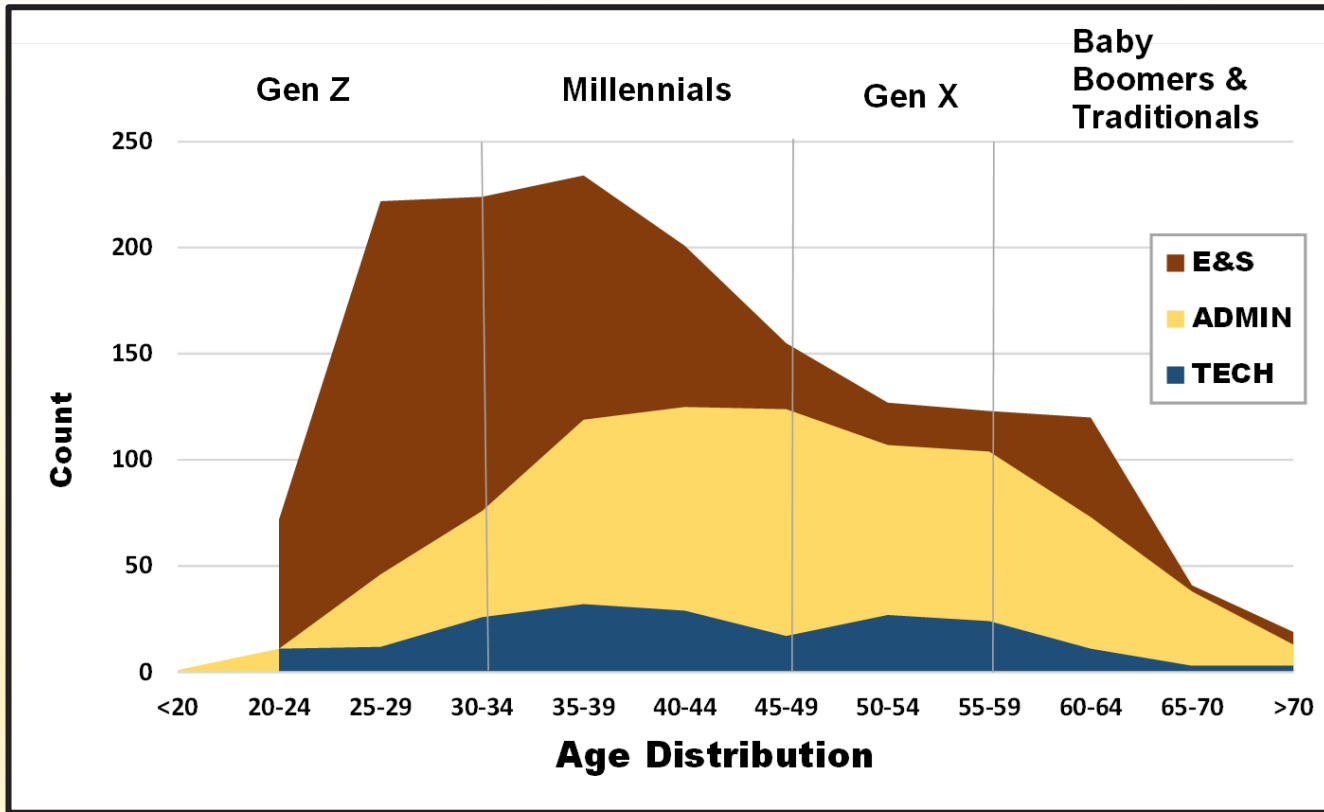
1,572

E&S w/Advanced Degrees

1,054

E&S w/PhDs

450



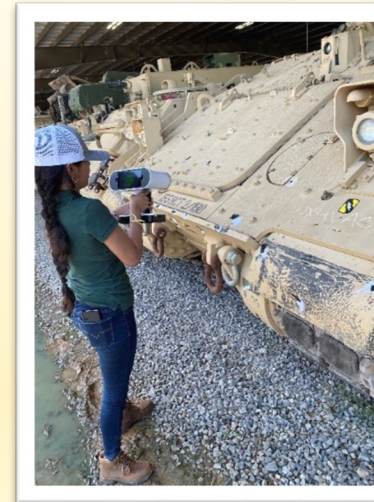
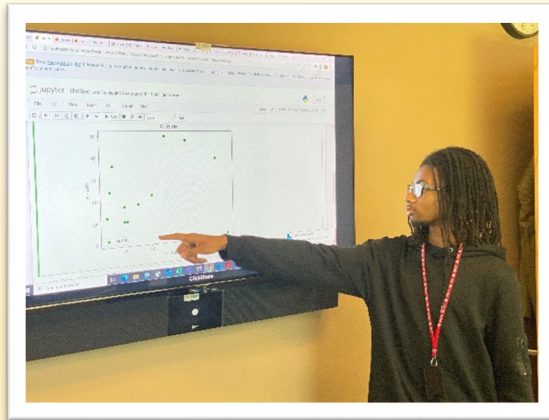
* Does not include other workforce population segments: student trainees, temp positions, active-duty military, AFP Interns, or contractors. Data reflects as of 31 August 2024



ERDC Student Program Vision

Provide real world experience to students solving tough environmental and engineering challenges that face the Corps of Engineers, the Army and the Nation.

- ❖ Students are actively engaged on real world R&D projects that inspire them to pursue and continue their Science, Technology, Engineering and Math (STEM) careers
- ❖ Upon graduation many students are ultimately hired by ERDC





Federal Student Employment Programs



- ❖ Science Technology, Engineering, and Mathematics (STEM) Student Employment Program (SSEP) (UG-PhD)
- ❖ Professional, Administrative, Assistant, Clerical and Technician Student Employment Program (PAACTSEP) (HS-PhD)



For consideration, you may apply by scanning the QR code above or email resumes, transcripts, and letters of good-standing to:

ERDCRecruitment@usace.army.mil

- ❖ Pathways Student Program (HS, BS, MS, PhD)

Apply through open vacancy announcements on [USAJOBS.gov](https://www.usajobs.gov)

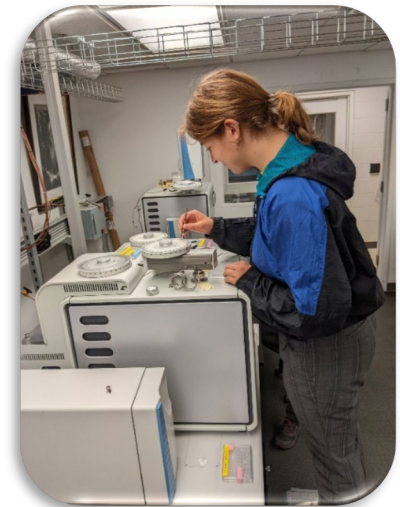


- All Programs must maintain at least 2.5 cumulative GPA (above 3.0 GPA preferable)
- U.S. Citizenship Required



SSEP & PAACTSEP Qualifications and Eligibility

- ERDC has Direct-Hire Authority (DHA) granted from the Office of Personnel Management (OPM) used to fill vacancies for critical hiring needs or shortage of candidates
- **SSEP** - Enrolled (or accepted) for enrollment in an undergraduate or graduate program leading to a Bachelors or advanced degree in a STEM course of study at an accredited institution for higher education
- **PAACTSEP** - Enrolled (or accepted) in a qualifying educational institution or certificate program (recent graduates may also be considered); this includes public, private, parochial high school or homeschool approved by the state, technical or vocational school, two-year or four-year college or university, graduate or professional school and post-secondary homeschool curriculum
- Enrolled at least half time; work part- or full-time; PAACTSEP can be used for recent graduates
- Maintain at least 2.5 cumulative GPA (above 3.0 GPA preferable)
- Federal employee
 - ❖ Earn service time towards retirement
 - ❖ Earn paid time off (sick and annual leave)
 - ❖ May receive Travel Bonus or other incentives
 - ❖ Easy conversion to full-time position
(complete degree and at least 640 hours of work through the program)
- How to Apply: Resume, transcript, and letter of good standing from school
 - ❖ Send resumes, transcripts, and letters to: ERDCRecruitment@usace.army.mil
- **U.S. citizenship required**
- Pay based on highest academic level completed



Scan to apply

STEM Student Employment Program (SSEP) Pay Scale



Qualification Requirements for STEM Student Education Program Trainees

Appointments may be at the highest grade or level for which the participant is qualified.*

Grade/level	Level of Education
GS-2 or Lab Demo Equivalent	Completion of high school or GED diploma.
GS-3 or Lab Demo Equivalent	Completion of 1 full academic year of post- high school study.
GS-4 or Lab Demo Equivalent	Completion of 2 full academic years of post-high school study or an associate's degree.
GS-5 or Lab Demo Equivalent	Completion of 4 academic years of post-high school leading to a bachelor's or equivalent degree.
GS-7 or Lab Demo Equivalent	Completion of 1 full academic year of graduate level education; or eligibility under the Superior Academic Achievement Provision and completion of a bachelor's degree.
GS-9 or Lab Demo Equivalent	Completion of 2 academic years of graduate level education or a master's degree or equivalent graduate degree.
GS-11 or Lab Demo Equivalent	For research positions, completion of all requirements for a master's or equivalent degree. For non-research positions, completion of all requirements for a PhD or equivalent degree.
GS-12 or Lab Demo Equivalent	For research positions, completion of all requirements for a PhD or equivalent degree.

Note: One full academic year of undergraduate, graduate, technical or high school education is the number of credit hours determined by the college, university or school to represent one year of full-time study.



PAACTSEP Student Pay Scale



Qualification Standards for STRL PAACTSEP Student Trainee Positions

Appointments may be at the highest grade or level for which the participant is qualified.*

Grade level or pay band equivalent	Level of education
GS-01 or pay band equivalent	Enrollment in high school or General Education Diploma (GED) program.
GS-02 or pay band equivalent	Completion of high school or GED diploma.
GS-03 or pay band equivalent	Completion of 1 full academic year of post-high school study.
GS-04 or pay band equivalent	Completion of 2 full academic years of post-high school study or an associate's degree.
GS-5 or pay band equivalent	Completion of 4 full academic years of post-high school study leading to a bachelor's or equivalent degree.
GS-7 or pay band equivalent	Completion of 1 full academic year of graduate level education or eligibility under the Superior Academic Achievement Provision and completion of a bachelor's degree.
GS-9 or pay band equivalent	Completion of 2 academic years of graduate level education or a master's degree or equivalent graduate degree.
GS-11 or pay band equivalent	For research positions, completion of all requirements for a master's or equivalent graduate degree. For non-research positions, completion of all requirements for a PhD or equivalent degree.

Note: One full academic year of undergraduate, graduate, technical or high school education is the number of credit hours determined by the college, university or school to represent one year of full-time study.



Scholarship for Service Programs



Full
Tuition



Annual Stipend
\$30,000-\$46,000



Book & Health
Allowance



Summer
Internship



Experienced
Mentor

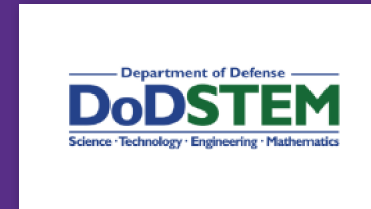


DoD
Employment

****The SMART application portal opens August 1st and closes December 6th in 2024.****

❖ Science, Mathematics, And Research for Transformation (SMART) Scholarship Program (AS-PhD)

<https://www.smartscholarship.org>



❖ CyberCorps[®]: Scholarship for Service (SFS)

<https://www.sfs.opm.gov>

*Must attend an academic institution that participates in the program. Must apply through the academic institution's program.





Internship Programs



❖ Army Educational Outreach Program (AEOP)

- ❑ Internships (HS, AS, BS) *must be 16 or older
- ❑ Fellowships (Postbaccalaureate, MS, PhD, Postdoctoral)

<https://www.usaeop.com/internships-fellowships>



❖ Oak Ridge Institute for Science and Engineering (ORISE) (HS-PhD)

<https://orise.orau.gov/internships-fellowships/index.html>



❖ National Science Foundation – Mathematical Sciences Graduate Internship Program (NSF–MSGI) – (PhD)

<https://orise.orau.gov/nsf-msgi>





AEOP Internships & Fellowships



High School Student Qualifications:

- HS students grades 10-12 (age 16+)
- U.S. Citizen
- GPA of 2.5 or above, 3.0 or above preferable

Student Benefits:

- Summer, semester, and year-round apprenticeships
- Students receive a monthly stipend based on experience and education level
- Work personally with scientists or engineers performing real life research
- Conduct research in DoD laboratories
- Present research to your peers

Undergraduate/Graduate Student Qualifications:

- Undergraduate students only
- U.S. Citizen
- GPA of 2.5 or above, 3.0 or above preferable
- Letter of recommendation from college faculty



- ❖ Summer Program applications open December/January each year
- ❖ Summer Program applications close end of February, Mid-March
- ❖ Applications are reviewed and selections made March-April
- ❖ On site summer apprenticeship May/June-August
- ❖ Can be extended to work during school year

To apply, visit: <https://www.usaeop.com/internships-fellowships>



DoD HBCU/MI Summer Internship Research Program



- Continuous 10-week **onsite** laboratory experience to give HBCU/MI **undergraduate or graduate students** an opportunity to explore STEM career interests through a personal mentorship by a DoD STEM professional supported by the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)) and administered by the Department of the Army
- The Research Program provides a bridge between the classroom and real-world experiences and **aims to increase the number of underrepresented scientists and engineers throughout the DoD**
- Travel (to/from site) and Housing is provided by the program (May 29 – August 12, 2025)
- Biweekly stipend of **\$1,400** per week; must work 40 hours per week
- Dislocation payment of **\$800**
- Daily transportation is the intern's responsibility

Eligibility Requirements

- ✓ US Citizen (no dual citizenship)
- ✓ Currently attending an HBCU or MI
- ✓ Majoring in a STEM academic discipline or DoD relevant discipline
- ✓ 18 or older at the time of application
- ✓ Full-time student or recent graduate (December 2024 or later)
- ✓ GPA of 3.0 or higher on a 4.0 scale
- ✓ Federal ID like a REAL ID or valid US Passport
- ✓ Successful completion of a background investigation

Visit <https://www.dodhbcumiinternship.com> to apply.



Internship Timeline

- ❖ Applications: October 14, 2024, to January 12, 2025 (11:59 PM EDT)
- ❖ Phase 1: Eligibility Review: January 2025 to February 2025
- ❖ Phase 2: Mentor Selections: February 2025 to March 2025
- ❖ Phase 3: DoD Program Office Acceptance: February 2025 to April 2025
- ❖ Phase 4: Background Investigations: February 2025 to May 2025
- ❖ Intern Seminar: July 10, 2024, to July 11, 2024, in Arlington, VA
- ❖ Internship: May 27, 2025, to August 9, 2025

* Selected applicants must be able to participate for the entire appointment period of the internship program.



Army HBCU/MI Student Program for Army Research & Knowledge (SPARK)



- 10-week continuous **onsite** summer internship providing research opportunities to U.S. HBCU/MI **undergraduate and graduate students** majoring in STEM fields at Army laboratories within the Army's science and technology enterprise supported by the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT)
- Travel (to/from site) and Housing is provided by the program (June 2 – August 8, 2025 or June 23 – August 29, 2025)
- Biweekly stipend of **\$1,000** per week; must work 40 hours per week
- Interns receive **\$250** dislocation amount
- Daily transportation is the intern's responsibility

Eligibility Requirements

- ✓ US Citizen (no dual citizenship)
- ✓ Currently attending an HBCU or MI
- ✓ Majoring in a STEM academic discipline or Army relevant discipline
- ✓ 18 or older at the time of application
- ✓ Full-time student or recent graduate (December 2024 or later)
- ✓ GPA of 2.75 or higher on a 4.0 scale
- ✓ Federal ID like a REAL ID or valid US Passport
- ✓ Successful completion of a background investigation

Visit <https://armyspark.com/> to apply.



Internship Timeline

- ❖ Applications: October 14, 2024, to January 12, 2025 (11:59 PM PST)
- ❖ Phase 1: Eligibility Review: January 12, 2025, to February 9, 2025
- ❖ Phase 2: Mentor Selections: February 10, 2025, to March 10, 2025
- ❖ Phase 3: Background Investigations: February 17, 2024, to May 23, 2024
- ❖ Intern Seminar: July 25, 2024, to July 26, 2024, in Crystal City
- ❖ Internship: June 2, 2025, to August 8, 2025 (Semester System Students)
June 23, 2025, to August 29, 2025 (Quarter System Students)

* **Selected applicants must be able to participate for the entire appointment period of the internship program.**

High Performance Computing Internship Program (HIP)



The **Department of Defense's (DoD) High Performance Computing Modernization Program (HPCMP) High-Performance Computing Internship Program (HIP)** develops the skills of future computational scientists and offers an opportunity for prospective DoD employees to experience defense-related research and development.

The HIP provides undergraduate and graduate students, majoring in science, technology, engineering, and mathematics (STEM) areas, internship opportunities to gain exposure to and experience with high-end computing (HEC) by working under the mentorship of scientists and engineers at DoD facilities across the nation.

Interns will be paired with DoD mentors for a 10-week on-site research experience.

“A HIP internship allows direct access to mentors with invaluable insight into the current challenges in aerodynamic research.”

-Dylan Jude, PAST HIP INTERN

<https://orise.orau.gov/hpcmp/>

Internship Details



Eligibility Requirements

- US Citizen & 18 yrs old at time of application
- Majoring in STEM discipline
- Full-time student or recent graduate
- Minimum cumulative GPA 3.0 or higher (4.0 scale)



Funding

- Monthly Stipend
- Travel (air/train) or reimbursement for mileage
- Housing provided and covered by program



Internship Location

- Locations vary but are typically in Mississippi, Maryland, Ohio, & California.
- Some opportunities are remote



Final Reporting

- Research paper
- Oral report

DATES

Applications Open

Early November 2024

<https://www.zintellect.com/Catalog>

Summer Research Program Dates

**May 2025
to August 2025**



Benefits for Choosing ERDC

Personal and Professional Growth in a Dynamic Atmosphere

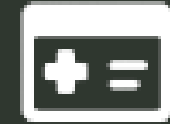


“Interning at ERDC was life changing for me. It allowed me to experience various fields and technology, and the atmosphere and community was helpful and encouraging.”

ANDRE COX,
ERDC-ITL INTERN
Jackson State University



Competitive Salaries



Health, Dental, Vision,
and Life Insurance



11 Paid Federal Holidays



Vacation and Sick Leave



Opportunities to
Advance and Move



Incentive Awards



Paid Parental Leave



Retirement Plan

THANK YOU!

Speler Montgomery

Talent Acquisition Program Manager

Directorate of Human Capital (DHC)

U.S. Army Engineer Research and Development Center

U.S. Army Corps of Engineers

ERDC-HCO@usace.army.mil



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<https://www.dvidshub.net/publication/1366/power-of-rd-newsletter>



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It all starts here.



Scan to begin your career journey with us!

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