

**Opportunity Title:** Process Engineering Intern

**Opportunity Reference Code:** DOE-MSIPP-17-8R-SRNL

**Organization** U.S. Department of Energy (DOE)

**Reference Code** DOE-MSIPP-17-8R-SRNL

**How to Apply** A complete application must include the following to be considered:

- Completion of all required fields in the application and successful application submission
- Undergraduate or graduate transcripts as appropriate
- Two recommendations

If you have questions, send an email to Kerri Fomby at [kerri.fomby@oraui.org](mailto:kerri.fomby@oraui.org) . Please include the reference code for this opportunity in your email.

**Application Deadline** 3/27/2017 12:00:00 AM Eastern Time Zone

**Description** The Minority Serving Institutions Partnership Program (MSIPP) Internships is a new program to promote the education and development of the next generation workforce in critical science, engineering, technology, and math (STEM) related disciplines that complement current and future missions of DOE national laboratories. The MSIPP Internship program is designed to provide an enhanced training environment for next generation scientists and engineers by exposing them to research challenges unique to our industry.

MSIPP Interns will be given the opportunity to complete Summer Internships aligned with ongoing U.S. Department of Energy Office of Environmental Management (DOE-EM) research under the direction of a host national laboratory. The internship will be performed at the host national laboratory, utilizing their facilities and equipment under the guidance of a research staff member.

Minority Serving Institutions are institutions of higher education enrolling populations with significant percentages of undergraduate minority students.

**Project:** The selected candidate will join a multidisciplinary research and development project team that is developing multi-scale, multi-physics models in order to simulate a chemical precipitation and calcination process and predict product physical characteristics. The final simulation will integrate chemical engineering process models at the process scale with computational fluid dynamics at the vessel scale and computational chemistry simulations at the molecular scale. The selected candidate will be working with the process simulation lead.

The selected candidate will:

- assist in development of chemical process models
- assist in development of simulation tool interfaces, i.e., interface between process simulation, computational fluid dynamics, and molecular simulation

**Location:** This internship will be located at Savannah River National Lab.



**ORISE GO**

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO 

GET IT ON  
 Google Play

Download on the  
 App Store

**Opportunity Title:** Process Engineering Intern  
**Opportunity Reference Code:** DOE-MSIPP-17-8R-SRNL

**Salary:** Selected candidate will be compensated by either a stipend or salary, and may include one round trip domestic travel to and from the host laboratory. Stipends and salaries will be commensurate with cost of living at the location of the host laboratory. Housing information will be provided to interns prior to arrival at the host laboratory, and will vary from lab to lab.

**Application Deadline:** March 27, 2017.

**Expected Start Date:** June 5, 2017.

**Qualifications** Eligible applicants must:

- Be a citizen of the United States,
- Be at least 18 years of age,
- Currently enrolled as a full-time undergraduate or graduate student at an accredited Minority Serving Institution,  
<http://orise.orau.gov/sepreview/msipp/Approved%20MSI%20School%20List%202017.pdf>,
- Working toward a science, technology, engineering, or mathematics (STEM) degree,
- Have an undergraduate or graduate cumulative minimum Grade Point Average (GPA) of 3.0 on a 4.0 scale, and
- Pass a drug test upon selection to participate in the MSIPP\*The process and timing for drug testing varies from lab to lab.Use of Marijuana/Cannabis or its derivatives if prescribed is legal in some states.However, having these drugs in your system is NOT legal at United States Federal Contractor sites and National Laboratories.

**Required Knowledge, Skills, Work Experience, and Education**

**Successful candidates will:**

- Be a current undergraduate or graduate student in Chemical Engineering or related field with an interest in computational simulation.
- Candidate will need to have completed fundamental chemical engineering (or demonstrated understanding of chemical process flow sheets, chemical thermodynamics, heat and material balances) and differential equations courses.

**Desired Knowledge, Skills, Work Experience, and Education**

**It is desirable for the candidate to have:**

- Knowledge of process simulation software such as Aspen, gProms, or Hysys. Advanced mathematics; experience with Linux operating system; and script coding or computer science course.

<b>Eligibility</b>	• <b>Citizenship:</b> U.S. Citizen Only
<b>Requirements</b>	• <b>Degree:</b> Currently pursuing a Bachelor's Degree or Master's Degree.

**Opportunity Title:** Process Engineering Intern

**Opportunity Reference Code:** DOE-MSIPP-17-8R-SRNL

- **Overall GPA:** 3.00
- **Academic Level(s):** Graduate Students, Post-Bachelor's, or Undergraduate Students.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** ([16](#) 👁)
  - **Engineering** ([27](#) 👁)

**Affirmation** I certify that I am at least 18 years of age and a US citizen, and am currently enrolled as a student in a degree seeking undergraduate or graduate program in a STEM field at an accredited Minority Serving Institution (MSI).