ABOUT THE JOB
The Hydroelectric Design Center (HDC) is an engineering design center within the U.S. Army Corps of Engineers (USACE), which is a part of the Department of the Army inside the Department of Defense. USACE has several military and civil works missions and one of the civil works missions is hydropower. USACE is the largest owner and operator of hydropower plants in the United States; USACE owns and operates 75 hydropower generation plants! Hydropower is such a significant mission that USACE established an engineering design center (currently with a staff size of 175) in Portland, Oregon to provide nationwide engineering design and field support work, the Hydroelectric Design Center.

The Automated Controls and Cyber Security (ACCS) Branch is looking to hire additional engineers at the entry level and also positions for people with prior controls/SCADA work experience. The ACCS Branch of HDC works on the SCADA systems for hydropower plants. The team consists of about 40 electrical engineers, computer engineers, mechanical engineers, and computer scientists which plan, design, configure, program, install, and maintain new and existing supervisory control and data acquisition (SCADA) control systems and the associated application software that operate the dams owned and operated by the U.S. Army Corps of Engineers (USACE) and the U.S. Bureau of Reclamation (USBR). Basically, we control big machines with computers! The work isn’t a good fit for people that prefer researching more than executing, want to avoid programming all together, only want to focus on cyber security solutions for an IT environment, or want to only design a single component (like a PLC or cell phone). This team designs a comprehensive system of components (selecting, configuring, testing, installing, and maintaining a SCADA system).

Because the nature of our work is a comprehensive approach to systems engineering, our staff work on a wide variety of tasks:

* Develop software using object-oriented languages and scripting
* Select and configure hardware, such as PLCs, touch screens, servers, and network equipment
* Design network architectures
* Program PLCs with Ladder Logic
* Design user interfaces
* Perform Cyber Security compliance and threat analysis for DoD RMF and NERC-CIP
* Test SCADA systems and software in our lab
* Travel onsite to dams all throughout the U.S. to install hardware and software updates

WORK ENVIRONMENT
Much of the work we do is in the office doing design, development and testing. This is often followed up with deployment into the field where you are likely to travel to the applicable dams to deploy and perform testing.

HDC has a large pool of experienced engineers who are more than happy to help train incoming engineers, so it is really a great environment to kick off your career. Mentorship happens informally, through design reviews, and training sessions like ACCS University, HDC University, SCADA Technical Workshops, and white board events. Most projects are worked by a group, and pair programming something you find here too. Hydropower plants have complex control systems, so there is a lot to learn. In addition, HDC has the concept of “low fences” which means we collaborate and share work across the different sections which means you won’t get “pigeon holed” into one subset of work and you aren’t likely to ever get bored.
**HOW TO APPLY**

If you think your career interests may align with the SCADA work we do at the U.S. Army Corps of Engineers’ specialized engineering office for Hydropower (HDC) then you might want to look at this job announcement.

* We are looking for Electrical, Computer, and Mechanical Engineers that are interested in digital control systems.
* There are entry-level openings and experienced openings. Recent graduates as well as students anticipating to graduate in the next 6 months would qualify for entry-level opportunities.
* U.S. citizenship is a requirement.

If you are interested in this position, then please forward your resume and cover letter to our Management Analyst, Justine Clark, at "Justine.E.Clark@usace.army.mil" with the subject, "SCADA Engineer Opening - LastName"

* If the subject line of the email does not match, then you will not be considered for this position.

**BENEFITS**

This link provides an overview on the benefits; [https://www.usace.army.mil/Careers/USACE-Employee-Benefits/](https://www.usace.army.mil/Careers/USACE-Employee-Benefits/)

There are a bunch of benefits, but I want to highlight a couple that are different to private industry: the 401k, Healthcare, Leave, and Pay.

**401K**

The "Thrift Savings Plan (TSP)" is basically a 401k, and I commonly hear it is one of the best you can find. They match 1 for 1, up to 5% and the rates (maintenance fees) are known to be the lowest. There is also a lifetime pension when you retire that is paid annually (your highest 3-year salary times the number of years you worked times 1%).

**HEALTHCARE**

For me, the government is covering 74% of my health care costs. If you retire with the Federal Government, they will continue to contribute their portion to your health insurance for the rest of your life. If you retire in a private position, most employer stop paying their portion of the health care costs and you have to foot the whole bill for the rest of your life.

**LEAVE**

10 federal holidays, 13 days a year of annual leave, and 13 days a year of sick leave. After 3 years, your annual leave is bumped up to 19.5 days a year. After 15 years, your annual leave is bumped up to 26 days a year. And if this is not enough, when you work over 8 hours a day or on a weekend, that additional time counts as your choice of overtime paid to you or extra leave.

**PAY**

I called it PAY, not SALARY, because you are paid on an hourly rate. In other words, if you work 45 hours a week instead of 40, then you get paid (Overtime or extra leave) for the extra 5 hours.

- Typical pay expectation for your first 4-5 years... An entry-level position with a Bachelor’s degree starts as a GS-07 Step 1 for 12 months, then a GS-09 Step 1 for 12 months, then a GS-11 Step 1 (a Step 2, 3, 4... occurs after 12 months in the same grade). After 2-4 years as a GS-11 (depending on growth), people apply for a GS-12 promotion. If you have a Master’s degree, then you start at the GS-09 level. If you have work experience, then you start at the GS-09 or GS-11 level depending on the level of experience.
- There are different pay tables OPM pulls from to determine how much we get paid, and I think these are the ones they grab for the GS levels;

[https://apps.opm.gov/SpecialRates/2021/Table075401012021.aspx](https://apps.opm.gov/SpecialRates/2021/Table075401012021.aspx)