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**NO ENLISTMENT, Civilian Position**

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**CIVIL ENGINEER FALL 2022 (2-3 positions) & Spring 2023 (2-3 Positions)**

The Corps is the largest public engineering organization in the world and Louisville District engineering division employ 300+ engineers alone. 90% of those engineers possess professional registration in their discipline. This provides excellent path of growth toward registration for students and flexible placement provides varied experience within their discipline upon graduation. CO-OP students would be expected to choose a different area upon return to broaden experience and skillset, again flexibly placed. CO-OP students are integrated into project delivery teams just like other engineers and are often linked with more senior engineers for guidance and direction. Project scope for USACE can be small or enormous in scale and also runs the gamut from simple to complex and unique. Very few engineering organizations can provide such diversity in project work.

**Civil Engineering** - co-ops can be flexibly placed in any of the following areas.

- Civil Engineering Design – Designs flood mitigation projects such as dams and levees within the district’s area of responsibility. The traditional core of civil engineering.
- Dam Safety – Performs inspections (hands on) and monitors health of Louisville’s roster of dams, many at USACE operated lakes.
- Levee safety – Similar to above but for levees and at areas NOT connected with larger flood control lakes. Levees can be found in many low lying urban areas.
- Geotechnical design – Performs investigatory work to classify soils at project sites and informs civil site and structural design.
- Hydraulics and Hydrology – Monitors, analyzes and forecasts hydraulic and hydrological events via software to inform release rates at lakes for flood risk reduction and inform civil site design.
- Dam and Levee Risk Cadre – Analyzes, programs and plans for dam and levee remediation or repair projects according to risk assessments informed by the associated safety section above.
- Civil Site Design – Designs site for civil and vertical construction (military and other) projects including grading, drainage, utilities etc.
- Structural Section – Provides structural design of facilities and structures for projects, typically buildings, for military and civil projects.

- Navigation Design section- Very similar to structural section but project work typically consists of project along the Ohio river navigation channel and may include more lock & dam components like miter or tainter gates rather than buildings.

### **Interdisciplinary Areas** (Civil, Mechanical, Electrical, Construction Engineering, CM):

- Design Management – Generates, directs, and manages design contracts with AE firms for projects. This provides broader experience of the design process and wide exposure to all engineering disciplines. Similar to a technical project manager.
- Cost Engineering – Generates and reviews project cost estimates and schedules. Primary support function to project management both in planning and construction.
- Value Engineering – Directs value engineering process, metrics, and criteria where required for projects. Generates, directs, and coordinates VE sub-contracts similar in practice to design management, but smaller scale with focus on VE for given project.

### **CO-OP Students (3 and 5 Session)**

- Flexible schedules
- Incentives up to \$2K/semester for up to 3 semesters
- Initially filled at GS-3 level (\$~29K/yr, depends on credit hours completed)

### **LOCATION**

USACE LRL District Office in Louisville, KY

### **REQUIREMENTS**

\*\*\*US Citizenship required\*\*\*

GPA  $\geq$  2.5

Majors Considered:

- Civil Engineering
- Construction Engineering
- Mechanical Engineering
- Electrical Engineering

### **POC's:**

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[raymond.e.frye@usace.army.mil](mailto:raymond.e.frye@usace.army.mil)

### **Desired Skills**

Communication Skills, Leadership, Construction, Self-driven, Construction Drawings

### **Qualification**

Construction experience preferred, but not required.