Internship Opportunity



Mississippi Department of Environmental Quality

MDEQ Engineering Intern/Co-Op Student-Job Description

MDEQ Environmental Engineers are responsible for protecting and maintaining Mississippi's natural resources, protecting human health, and improving the quality of air, water, and land in Mississippi. MDEQ Environmental Engineers fulfil these responsibilities through permitting, monitoring, compliance, enforcement and financial/technical assistance. MDEQ has several **engineering** internship and Co-Op opportunities across the agency. Some of the duties found in these positions include, but are not limited to:

Surface Water

- Working on projects aimed at improving water quality.
- Visiting different projects designed to reduce pollution.
- Meeting with landowners and resource partners to gather information and to collect data.
- Helping to create reports and update project progress when back in the office.
- Supporting the development of databases to store and manage project data.
- Building tools and models to analyze data and predict project outcomes.
- Assisting in the design of user-friendly interfaces for data input and result presentation.
- Working with mapping tools like ArcGIS to visualize water quality data.

Municipal/Domestic Wastewater

- Assists in permit development for operations of private and governmental wastewater systems.
- Inspecting wastewater treatment facilities and assisting in writing inspection reports.

Permitting

- Completing technical reviews of various permit applications.
- Issuing various permits, including:
 - Wastewater permits
 - Stormwater permits
 - Air permits
 - 401 Water Quality certifications (for wetlands).
- Conducting pre-permitting site inspections.

o Assists with the development in electronic permitting forms and permitting efficiencies.

Compliance and Enforcement

- Participating in compliance activities associated with diverse industry groups, including:
 - Reviewing and analyzing self-monitoring submittals
 - Conducting facility inspections.
- o Assists in identification of violations and the initial stages of enforcement.

Solid Waste

 Supporting the Hazardous Waste Branch with data management for contaminated hazardous waste sites.

Office of Land and Water Resources

- o Conducting Dam Safety inspections.
- Assisting in hydrologic and hydraulic modeling to evaluate dam failure impacts.
- Conducts surface water flow monitoring.
- Participates in ground water level monitoring.
- Provides water withdrawal permitting and compliance support.
- o Assists in analysis of Mississippi's Statewide well report.