

<https://mrce.com/job/entry-level-geotechnical-engineer-new-york-ny-3-2-2/>

Description

Geotechnical Instrumentation Engineer

Mueser Rutledge Consulting Engineers (MRCE) is a successful specialty consulting firm at the forefront of geotechnical, foundation and waterfront engineering. We are an award-winning Top 500 ENR Design Firm working on challenging projects throughout the greater New York Area and abroad. Positions are currently available for entry level Geotechnical Instrumentation Engineers to work full-time in our New York City office.

The Instrumentation Engineer supports MRCE design and construction projects with instrumentation to measure construction performance or condition behavior and performs field testing on construction sites. The Instrumentation Engineer is responsible for Instrument planning, layout, assembly and installation; troubleshooting; and data collection, interpretation, and reporting. The Instrumentation Engineer prepares and install instruments at construction sites, connects the instruments to web-based data acquisition systems, and programs data plots for reporting.

Instruments in use include automated total stations, LIDAR scanners, web cameras, seismographs, tilt meters, strain gages, VW Piezometers, level loggers, etc. Instrument installation requires working on active construction sites and in subway tunnels. MRCE will provide safety training required for site access and safe site work.

The Instrumentation Engineer will be expected to perform PDA testing of driven piles and interpret pile capacity. PDA testing requires working with hand tools to attach instruments to the test piles, working with digital instruments to measure pile behavior during driving, confirming proper equipment operations, and interpreting pile performance. PDA test interpretation includes follow-up computer CAPWAP analysis to confirm pile capacity. Training will be provided; passing a certification

Essential Functions

Instrumentation Preparation and Maintenance

- Work in our instrument lab to prepare and assemble instruments for site installation.
- Maintain, overhaul, calibrate and test a wide variety of industrial instruments.
- Troubleshoot instruments, as needed.
- Conduct periodic preventive maintenance and inspections to diagnose existing or potential issues; calibrate and adjust as needed.
- Return instruments to inventory / inventory control.

Field Work

- Mobilize materials and equipment to construction sites and install equipment.
- Set up instruments and communications for remote operations.
- Troubleshoot and repair malfunctions.
- Exhibit safe work habits.

Reporting and Data Management

- Prepare field reports and sketches summarizing instrument installation and construction progress.

Employment Type
Experience
New York, NY

Date posted
July 19, 2022

- Program digital data collection and storage systems.
- Program data plot software and review data to evaluate changes with time and construction progress.

Required Qualifications

What is needed to be hired.

- Education: Bachelor's degree in civil engineering from an ABET/EAC accredited program.
- Required Skills and Experience:
 - Safe work habits.
 - Use of hand and power tools.
 - Demonstrated ability to work independently in planning, installation, and equipment troubleshooting.
 - Able to lift 50 lbs., walk on uneven ground.
 - Licensed to operate a car or van for equipment transport.
 - Able to work comfortably from ladders and aerial lifts, aerial lift operation.
 - General knowledge of electrical systems, wireless communication, computer networking, or land surveying a plus.
- **Interests:** construction, high-tech instruments, and using technology in

Typical Physical Demands and Work Environment

The physical demands described herein are representative of those that must be met by an employee to successfully perform the essential functions of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the functions.

- Navigate jobsite/field environment as well as office environment.
- Remain either stationary for extended periods of time (for instance, in a chair or vehicle), as well as move often (for instance, walking through a job site), depending on project needs.
- Lift and carry equipment (up to 50 lbs).
- Position self in a stooping, kneeling, or crouching manner as well as climb ladders and stairs, for reading instruments.
- Navigate uneven ground and footing conditions (for example, soil /gravel/ mud footing, riprap and slopes, rugged terrain).
- Work in varying weather conditions (for example, cold, hot, rain, snow).
- Wear gloves, use hands, handle or feel objects, tools, machinery and computers.
- Communicate with others; exchange information accurately.
- Operate a computer.
- Operate specialized equipment and instruments.

Workplace Location Requirements

Work in varying risk levels in the construction work environment.

- Flexible for working in office /lab and at field sites on a long term, daily, or rotational basis.
- Be available to work evenings and weekends to meet project demands

Travel Requirements

- Travel locally by public transportation, or with vehicle for equipment transport.
- Travel long-distance by air or train; overnight stays.

About MRCE

Mueser Rutledge Consulting Engineers (MRCE) is a leading engineering consultant specializing in geotechnical studies, design of excavation support systems, waterfront structures, and foundations. MRCE is based in New York City and has a branch offices in Washington DC and Philadelphia, PA. MRCE has extensive experience with complex geotechnical conditions and specialized geotechnical construction methods. Engineers, architects, developers, contractors, lawyers, and public agencies regularly utilize MRCE expertise to define geotechnical issues and provide compatible designs for efficient construction. MRCE services extend well beyond the geotechnical site definition role to include complete foundation and excavation designs, contract drawings, instrumentation, and construction inspection services.

The above statements are intended to describe the general nature and level of work required by individuals accepting employment for this position. They are not intended to be an exhaustive list of all duties, responsibilities, and skills required. MRCE has authority to change or assign other duties to the Instrumentation Engineer role.

MRCE supports professional development, encourages extracurricular technical activities, and Professional Engineering registration. The firm offers competitive salaries, overtime pay, paid holidays, vacation and sick leave, medical benefits, life insurance, TransitChek commuter benefit, a 401(k) plan, and other benefit options to full time employees. MRCE is committed to providing equal employment opportunity for all qualified persons.

Contacts

Send resumes to:

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