



ENGINEER INTERN

JC: 000032
PB: 081
FLSA: Non-Exempt

BU: 92 (NR)
Created: May 2012
Revised: June 2019

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

Under direct supervision, performs a variety of basic professional engineering duties in the engineering division to which assigned. Assigned engineering fields may include civil, construction management, environmental, computer systems, mechanical, electrical or train control engineering. Performs related work as assigned.

CLASS CHARACTERISTICS

This is the training level in the engineering classification series. Positions will partner with experienced engineers in planning, design, construction management, materials testing, quality assurance, inspections and software development for projects at various BART facilities. Assignments are project-driven and task-oriented; the work will directly contribute to the various BART Departments' commitment to excellence in engineering by delivering timely and cost-effective services while providing valuable training and experience that will enhance the student's educational goals. This classification is distinguished from the Junior Engineer in the latter is the professional entry level classification of the engineering classification series requiring a college degree.

REPORTS TO

Engineering Manager or designee.

EXAMPLES OF DUTIES – *Duties include, but are not limited to, the following:*

1. Performs a variety of basic level professional engineering duties with a designated mentor in the assigned division, including engineering specifications, computer systems applications, preliminary cost estimates, engineering drawings, calculations and analyses.
2. Conducts supervised field inspections and investigations.
3. Assists in designing computer hardware and software modifications.
4. Assists in designing and specifying special testing and service equipment to troubleshoot and maintain transit vehicles.

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5. Supports work activities to ensure compliance with established policies and procedures; reviews proposed changes to approved plans and specifications.
6. Assist mentor in preparing engineering designs, specification costs and quantity estimates for engineering construction projects.
7. Conducts root cause analysis for Engineering projects with a focus on resolving inefficiencies.
8. Analyzes and resolves technical problems, including computer hardware and software.
9. Learns how to conduct special studies and prepare a variety of reports and correspondence.

QUALIFICATIONS

Knowledge of:

- Basic principles and practices of the engineering discipline to which assigned
- Appropriate sources of engineering information
- Computer applications as applied to the solution of engineering problems
- Engineering materials, equipment and methods

Ability to:

- Apply basic engineering principles and practices to the solution of engineering problems
- Conduct engineering studies and evaluations and write clear and concise reports
- Analyze technical problems, including those involving computer hardware and software
- Learn engineering division procedures and applicable laws, codes and regulations
- Interpret and prepare drawings and specifications
- Learn to prepare construction and/or installation cost estimates
- Keep accurate records
- Establish and maintain effective working relationships with those contacted in the course of the work

MINIMUM QUALIFICATIONS

Education:

Pursuit of a Bachelor's degree in Engineering or a related field from an accredited college or university.

Experience:

No experience required.

Other Requirements:

Must possess sufficient mobility to perform field inspections and investigations.

WORKING CONDITIONS

Environmental Conditions:

Office environment; field environment; exposure to computer screens.

Physical Conditions:

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May require maintaining physical condition necessary for walking, standing or sitting for prolonged periods of time.

BART EEO-1 Job Group: 3000 – Engineers
Census Code: 1530 – Miscellaneous Engineers
Safety Sensitive: No