

**MICHIGAN CIVIL SERVICE COMMISSION**  
**JOB SPECIFICATION**  
**ENGINEERING ASSISTANT**

**JOB DESCRIPTION**

Employees in this job participate in and oversee the performance of a variety of work activities designed to carry out the basic engineering aspects of an engineering program.

There are four classifications in this job.

**Position Code Title - Engineering Assistant-E**

Engineering Assistant 6

This is the entry level. The employee, in a learning capacity, performs a range of engineering assistant assignments while receiving on-the-job training and close supervision.

Engineering Assistant 7

This is the intermediate level. The employee works in a developing capacity with increased responsibility for performing a range of engineering assistant assignments.

Engineering Assistant E8

This is the experienced level. The employee performs a full range of engineering assistant assignments and uses judgment in making decisions based on established methods and procedures. Guidance and directions are generally available as needed.

**Position Code Title - Engineering Assistant-A**

Engineering Assistant 9

This is the advanced level. The employee serves as a lead worker, coordinating, assigning, and reviewing the work of lower-level Engineering Assistants, or as a senior worker, performing the most complex engineering assistant assignments. Senior-level employees perform complex assignments beyond those expected at the experienced level which have been approved by Civil Service.

**NOTE:** Employees generally progress through this series to the experienced level based on satisfactory performance and possession of the required experience.

**JOB DUTIES**

**NOTE:** The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Collects field data for various types of engineering studies using manual or electronic survey devices.

Sets up computerized traffic counters.

Conducts and processes speed counts, gap studies, delay studies, and truck weight studies.

Conducts and processes manual traffic or inventory counts and vehicle or equipment classifications and related surveys.

Calibrates electronic equipment and performs basic troubleshooting and repair.

Retrieves and processes data from survey instruments, various electronic instruments, and test equipment.

Conducts interviews with tourists and the public to secure survey information.

Carries, sets, and drives survey stakes and other survey points.

Draws, inks, traces, and colors maps, drawings, charts, and graphs.

Takes cross sections to establish construction grades and slopes.

Measures angles, bearings, and elevations for preparation of topographical and contour maps.

Tests gradation of aggregates and asphalt penetrations.

Assists in the inspection, sampling, and/or testing of construction materials.

Assists in inspecting the fabrication of pre stressed concrete beams and/or metal structures and components.

Assists soil and rock boring crews and/or pavement and structure coring crews to gather data.

Assists in the preparation of FCC licenses for radio systems and components.

Assists with FCC license maintenance, application filing, existing license modification, renewals and cancellations.

Assists with antenna site registration, and maintains and verifies accuracy of registration data.

Performs general maintenance on vehicles and equipment.

Maintains time sheets, vehicle logs, and expense vouchers.

Performs related work as assigned.

### **Additional Job Duties**

#### **Engineering Assistant 9 (Lead Worker)**

Schedules work assignments, determines work priorities, and oversees the work of lower-level Engineering Assistants.

Explains work instructions and develops methods and procedures to meet required needs.

Trains new employees.

#### **Engineering Assistant 9 (Senior Worker)**

Performs the most complex engineering assistant assignments on a regular basis.

### **JOB QUALIFICATIONS**

#### **Knowledge, Skills, and Abilities**

**NOTE:** Some knowledge in the area listed is required at the entry level, developing knowledge is required at the intermediate level, considerable knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

Knowledge of basic arithmetic.

Knowledge of the practices and materials used in basic engineering work.

Knowledge of the practices and materials used in engineering work.

Knowledge of engineering terminology.

Ability to comprehend and carry out oral and written instructions.

Ability to use personal computers.

Ability to use and maintain equipment.  
Ability to maintain records and prepare reports.  
Ability to communicate effectively.  
Ability to maintain favorable public relations.

### **Additional Knowledge, Skills, and Abilities**

#### **Engineering Assistant 9 (Lead Worker)**

Ability to establish work priorities, assign, and evaluate the work of lower-level Engineering Assistants.  
Ability to train Engineering Assistants.

#### **Engineering Assistant 9 (Senior Worker)**

Ability to perform the most complex engineering assistant assignments.

### **Working Conditions**

Employees may work in field or office locations and may be required to move from one location to another.

Work may be performed near busy highways, and in adverse weather conditions.

The job requires travel.

### **Physical Requirements**

*None*

### **Education**

Education typically acquired through completion of high school.

### **Experience**

#### **Engineering Assistant 6**

No specific type or amount is required.

#### **Engineering Assistant 7**

One year of experience equivalent to an Engineering Assistant 6.

#### **Engineering Assistant E8**

Two years of experience equivalent to an Engineering Assistant, including one year equivalent to an Engineering Assistant 7.

#### **Engineering Assistant 9**

Three years of experience equivalent to an Engineering Assistant, including one year equivalent to an Engineering Assistant E8.

### **Special Requirements, Licenses, and Certifications**

Some positions are assigned job duties that may require possession of the Commercial Driver's License (CDL) issued by the Secretary of State as required by Public Act 346 of 1988 to operate a designated state vehicle.

**NOTE:** Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

**JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION**

<b><u>Job Code</u></b>	<b><u>Job Code Description</u></b>	
ENGINRAST	ENGINEERING ASSISTANT	
<b><u>Position Title</u></b>	<b><u>Position Code</u></b>	<b><u>Pay Schedule</u></b>
Engineering Assistant-E	ENGRASTE	L32-004
Engineering Assistant-A	ENGRASTA	L32-009

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