

Apprenticeship Programs

Career Paths to Success Through Apprenticeship

What is Apprenticeship?

Metropolitan's Apprentice Mechanical and Electrical Operations Technician Programs are formal structured training programs developed by MWD in collaboration with a recognized local educational agency.

The purpose for these programs is to provide entry to journey-level skills training to Metropolitan's workforce in the technical, vocational, and trades occupations using a combination of structured on-the-job training, related classroom instruction, and home study.

The MWD Joint Apprenticeship & Training Committee (JATC) supervises the program administration. The JATC is a ten-member management and labor body.

Methods and Means of Training Delivery

The primary method of training delivery will be accomplished in-house using qualified apprenticeship instructors. The training will be delivered at various locations throughout Metropolitan's service area. Training may also be delivered through other methods and means to include:

- Available and applicable community college courses of instruction
- Third party and vendor provided training related to the course curriculum
- Other apprenticeship programs by mutual or contractual agreement



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Mission Statement

To provide Metropolitan with highly skilled technicians and trades people to meet current and future workforce needs through comprehensive training delivered using a variety of training methods, means, and media.

Related and Supplemental Instruction

The related and supplemental instruction provides the academic component of apprenticeship training through a variety of delivery methods including instructor managed classroom lecture/lab sessions, interactive multimedia, and home study.

Related and supplemental instruction classes will be held during the apprentices normal working hours for an average duration of 80 hours per 6-month period of apprenticeship. All home study is to be performed by the apprentice during non-working hours.

The courses of instruction for both programs have been summarized as follows:

RELATED COURSES / Mechanical Program

- Mathematics & Mensuration Fundamentals
- Industrial Safety
- Mechanical O&M Fundamentals
- Hand & Power Tools
- Drawings & Schematics
- Rigging, Hoisting & Equipment Moving & Installation
- Machine Tools & Operations
- Mechanical Power Transmission
- Hydraulic Fluid Power Transmission
- Pumps & Pump Hydraulics
- Compressors & Pneumatics
- Piping, Valves & Pipefitting
- Welding & Fabrication
- Water Treatment Operations
- Water Distribution Operations
- Maintenance Management

RELATED COURSES / Electrical Program

- Mathematics & Mensuration Fundamentals
- Industrial Safety
- Electrical O&M Fundamentals
- Hand & Power Tools
- Drawings & Schematics
- Rigging & Hoisting Operations
- Meters & Test Equipment
- Motor Theory & Maintenance
- Lighting Systems
- Advanced Electricity & Electrical Systems
- Electrical Systems Troubleshooting
- Electronics for Electricians
- Process Control Systems & PLC's
- Signal/Instrumentation Systems
- Electrical Systems Installation
- High Voltage Systems & Equipment
- Water Treatment Operations
- Water Distribution Operations
- Maintenance Management

On-The-Job (OJT) Work Progression Hours

Work progression hours are categories of work the apprentices engage in throughout the term of their apprenticeship in order for them to gain the requisite experience to become a well rounded journeyworker. The work progress hours are estimated hours, only. The total number of hours accrued in each category can vary to a certain extent; however, it is the intent of the MWD JATC that each apprentice obtain the indicated number of hours in each of these categories. Team managers will be responsible for assigning work that will provide a rotation between these categories for each of their apprentices. In some cases, apprentices will be placed on temporary assignment on another team in order for them to gain the required work experience.

OJT WORK PROGRESSION HOURS // APPRENTICE MECHANICAL OPERATIONS TECHNICIAN

<u>Work Process</u>	<u>Hours</u>	<u>Work Process</u>	<u>Hours</u>
● Water System Equipment	2000	● Bench Work & Machine Shop	400
● Water Conveyance Systems	1520	● Welding & Fabrication	400
● Cranes, Hoists, & Rigging	400	● Mechanical Equipment Installation	400
● Operational Procedures	400	● Job Preparation & Documentation	1760

TOTAL ESTIMATED HOURS: 7280

OJT WORK PROGRESSION HOURS // APPRENTICE ELECTRICAL OPERATIONS TECHNICIAN

<u>Power Systems</u>	<u>Hours</u>	<u>Work Process</u>	<u>Hours</u>
● Low Voltage	160	● Lighting Systems	350
● Standard Voltage	2750	● Control Systems	1400
● High Voltage	240	● Signal/Instrumentation Systems	220
● Operational Procedures	400	● Job Preparation & Documentation	1760

TOTAL ESTIMATED HOURS: 7280

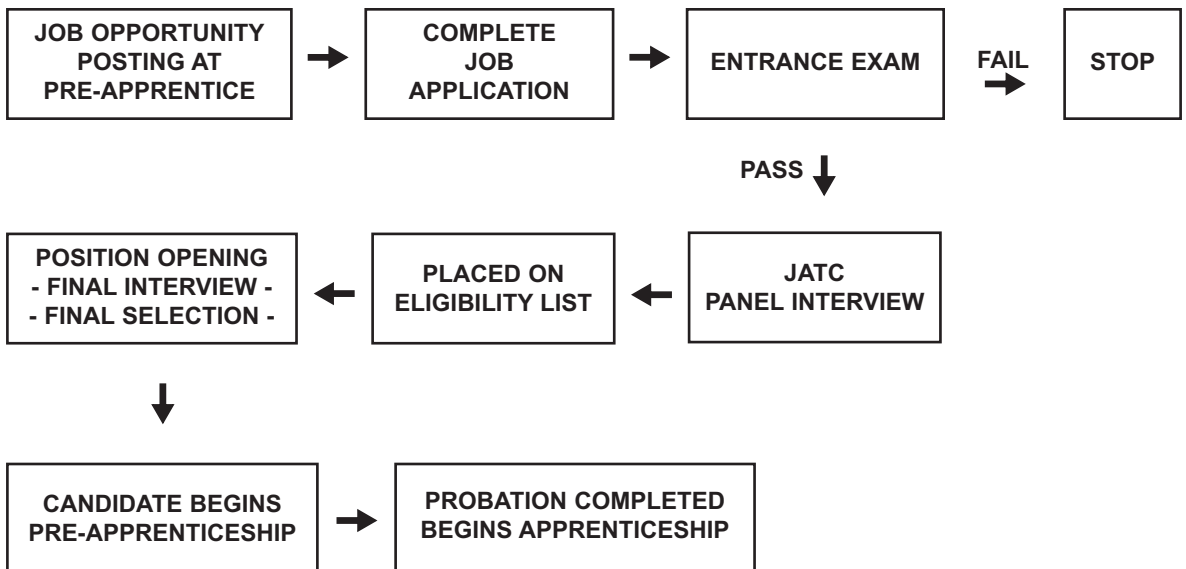


APPLICATION PROCESS

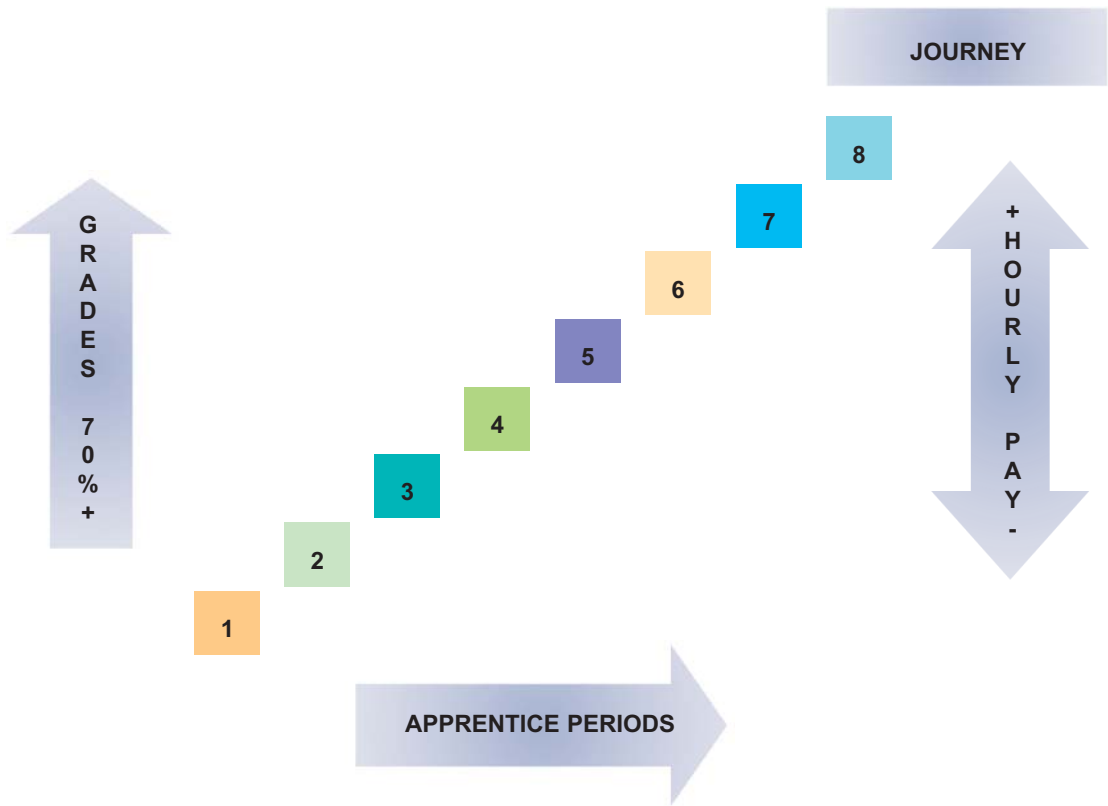
Apprenticeship opportunities, when available, will be at the pre-apprentice classification or entry-level. The pre-apprentice period is a probationary or trial period of approximately six months duration. The objective of the pre-apprenticeship period is to prepare new workers to enter into a four-year apprenticeship program in the electrical or mechanical maintenance fields.

Pre-apprentice candidates must successfully complete the probationary period to include the required supplemental instruction to be eligible for advancement into either four-year apprenticeship program.

Inquiries regarding apprenticeship program opportunities at MWD can be made by accessing Metropolitan's internet website at www.mwdh2o.com and clicking on "Careers at Met." All applicants will be notified on the status of their application. Qualified candidates will be notified and scheduled to take the entrance exam. Successful exam candidates will be scheduled for an interview and placed on an eligibility list for final interviews.



APPRENTICESHIP PROGRAM PROGRESSION

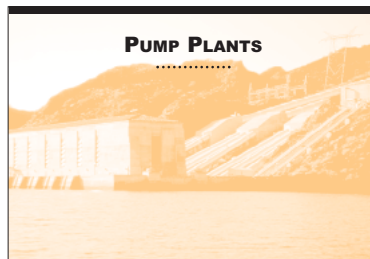


WORK LOCATIONS / AREAS OF ASSIGNMENT



Located at various facilities throughout

- Los Angeles County
- Orange County
- San Bernardino County
- Riverside County



Training Locations:

Located at various sites throughout Metropolitan's Service area.



Hinds Pump Plant