

APPRENTICESHIP: A SHORT HISTORY

Since ancient times civilizations have lived, grown, flourished and died in direct relation to their ability to teach skills to younger generations. Traditionally, skills were passed on to succeeding generations by master craftsmen. Many of these skills required years of slow, laborious training to produce a craftsman worthy of his master.

Youths were sent to live with masters to learn a trade. Fathers and mothers taught sons and daughters from childhood. With limited economic opportunity and no formal education system, this early system of apprenticeship was vital to sustain the skills necessary to continue civilization and culture.

During the Industrial Revolution, apprenticeships were instrumental in teaching and training the skills necessary to run the machinery that resulted from the technological advances of the day. In many industries, it was and still is, the only way that job skills were taught and passed on to the next generation of workers.

Apprenticeship is nothing more than a formal, organized system of On-The-Job Training (OJT), in hand with Related Supplemental Instruction (RSI). The apprentice learns by doing and earns while learning.

The primary objective of any apprenticeship program is to efficiently and effectively train workers to attain the competency to perform as journeyman.

THE OPERATING AND MAINTENANCE ENGINEERS APPRENTICESHIP PROGRAM

The Operating and Maintenance Engineers Apprenticeship Program combines classroom instruction with on the job training in an intensive, long term program designed to train workers to meet the demands of very specific industries. It is good old fashioned American values combined with current technology to produce highly skilled, productive workers.

The program is a partnership between the Union and Industry, with very little need for government intervention. It draws on the resources of the Unions and the Industries, producing direct dividends to both through a more productive work force.

Training is industry, job, and machine specific. Training programs can be designed and customized to fit the demands of your specific industry.

The Operating and Maintenance Engineers actively recruits minorities and women, making it a good avenue to fulfill affirmative action employment. All applicants are effectively screened and thoroughly tested before any training is undertaken. They must have a High School diploma,

General Education Development (GED) diploma, Test Assessing Secondary Completion (TASC), or High School Equivalency (HiSet), be at least eighteen (18) years old, and be proficient in Mathematics and English (reading and writing) at an eighth (8th) grade level or above. There is a six (6) month probationary period from date of the Apprenticeship Program start date, with constant reviews coordinated by the Operating and Maintenance Engineers program to ensure that the applicant is making progress both educationally and on the job.

Equipment and machinery in the classroom is kept current, so that what the apprentice learns in the Operating and Maintenance Engineers program can be specifically applied to the industry and job assignments.

The goal of the Operating and Maintenance Engineers program is to effectively use training and technology to improve the quality of workers' skills and to transfer those skills back to the work force.

Targeted Industries include:

Major Hotel Industry • Hi-Rise Office Buildings • Manufacturing Plants • Industrial Laundries • State, County, and Federal Facilities • Waste Water Treatment Plants • Oil and Other Refineries • Steam Plants • Hospitals • Other industries that require skilled operators of heavy duty industrial equipment.

PARTICIPATING EMPLOYERS' RESPONSIBILITY

“Today, our economic success depends on our ability to compete nationally.”

As a participating employer in the Operating and Maintenance Engineers Apprenticeship Program, there are certain responsibilities as well as many benefits.

Apprentices start out at sixty percent (60%) of journeyman's wages. Every six (6) months an evaluation is performed to see if the apprentice is eligible for a five percent (5%) increase. The program is a four (4) year program to allow the development of skills to justify full journeyman wages.

The Apprenticeship Program can also be applied to existing employees who have been employed with a firm for a minimum of twelve (12) consecutive months and upon passing the “Apprenticeship Examination “given every two (2) years. The employee will then be eligible to participate in the Operating and Maintenance Engineers Apprenticeship Program during the two (2) year period of testing eligibility, and will become an Apprentice Operating and Maintenance Engineer with the employer requesting the employee to become an apprentice.

In this manner, the Operating and Maintenance Engineers Apprenticeship Program can provide an employer with a source of new, qualified employees, as well as a source to upgrade or retrain

the skills of existing employees. It is an excellent vehicle for employers to fulfill their obligations in hiring under Affirmative Action plans.

Operating and Maintenance Engineers Training Trust accepts all responsibility for training while enrolled in the program. Attendance requirements are extremely strict and class requirements are rigorous. It is not our goal to turn out great numbers of semi-skilled workers, but to produce highly qualified and well trained workers who have solid knowledge and specific, technical job skills.

ADVANTAGES OF PARTICIPATION IN THE OPERATING AND MAINTENANCE ENGINEERS APPRENTICESHIP PROGRAM

“Good training pays off. Training goes hand in hand with productivity.”

Employers of all trades need employees with increasingly better and stronger skills to handle advancing technology. The Operating and Maintenance Engineers program provides employers with productive employees while the training process is taking place. It also provides ongoing training to keep the workforce state-of-the-art.

The program is an excellent screening process and takes the risk out of hiring new employees. All candidates must meet minimum requirements to be eligible to participate:

- Must be at least eighteen (18) years of age
- Must have a high school diploma or GED
- Must be in good physical condition
- Must prove U.S. citizenship or up to date work permit
- Must be fluent in English

The Operating and Maintenance Engineers Program can help employers meet Federal requirements for affirmative action. It also will keep employees up to date on government regulations - EPA, OSHA, AQMD, etc. Apprentices are provided an extensive, current library of reference material in the form of books that they have access to during their training time.

Participating employers have the advantage of an in-house training program, reducing the overhead expense normally associated with outsourcing training programs.

A study at the University of Pittsburgh determined that:

“Training programs that are successful in teaching, thinking, and learning skills, are programs that are patterned after elements that apprenticeship programs have used for years. Classroom

instruction and on the job monitoring, allowing the employer to contribute to the training progress of the worker. These types of programs are responsive to the employers' and workers' need for flexibility and portability of the training from classroom to worksite."

HOW THE PROGRAM WORKS AT OPERATING AND MAINTENANCE ENGINEERS APPRENTICESHIP

The Operating and Maintenance Engineers Apprenticeship Program begins with the administration every two (2) years of the TABE - Test for **A**dult **B**asic **E**ducation examination. This examination is given on an open basis to candidates recruited through newspaper advertising, social agencies, schools, trade magazines, etc. Candidates are placed on a list according to their test score results.

If, at the end of the two (2) year period the eligible candidate hasn't been selected as an apprentice, the testing process must be repeated to maintain eligibility as a candidate for apprenticeship.

When an employer contacts the Operating and Maintenance Engineers, the resumes of top candidates from the eligibility list are sent to the Employer(s) for review. The Employer(s) may interview as many eligible candidates as they like.

After an eligible candidate is chosen, an Apprentice Agreement is signed and the eligible candidate is enrolled as an apprentice into the program. The apprentice works for the employer, receives On-the-Job Training and attends classes in the evening, usually two nights per week. Work hours and education hours, as well as grades, attendance, and performance are tracked. Apprentices must maintain a grade of "C" or better in each course and cannot miss more than two (2) classes per semester. The Joint Apprenticeship Training Committee is responsible for all educational expenses.

Most employers who would be interested in the Operating and Maintenance Engineers Apprenticeship Program are already paying into the Operating and Maintenance Engineers Training and Maintenance Trust Fund. This covers the cost of the program, so there are no additional expenses to participating employers.

This is a four (4) year apprenticeship program. Classroom instruction is designed to teach competence in all technical aspects of an occupation as well as how to make sound decisions and technical judgments.

A report to Congress by the Office of Technology Assessment concludes that "Good training pays off— for the individual worker whose skills are upgraded, for the company seeking a competitive edge, and for the Nation in overall productivity and competitiveness."