

APPLIED INDUSTRIAL TECHNOLOGY (COMMUNICATION TRANSPORT SYSTEMS) (ATCW)

ATCW-1010 Worker Safety for Communication Transport 2 Credits

Covers specific safety concerns for the communication transport worker including job conditions and pole climbing hazards. Includes an introduction to the Occupational Safety and Health Act (OSHA) for 10 hour certification. Topics include employee responsibilities and rights, standards, and basic hazard training.

Lecture: 2 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-1020 Communications Worker History 2 Credits

Covers the history of communications in America, union organizing efforts and union evolution. Includes the divestiture and deregulation of the communication industry and the effects on telephone workers and companies.

Lecture: 2 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-1040 Basic Information Systems 2 Credits

Certification course covering skills, transmission mediums and administration tasks required for industry proficiency. In addition, installation of cable systems in conjunction with industry standards will be covered.

Lecture: 2 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-1060 Fire Stop and Overhead Safety 1 Credit

Covers the purpose and systems of fire stopping of communication transport systems including types, governing codes and standards and oversight agencies for installation and testing qualifications. Includes the safety standards including hazard recognition and operator responsibilities with respect to aerial platforms.

Lecture: 1 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-1210 Introduction to Information Transport - Copper 2 Credits

Advanced certification course covering in depth skills, transmission mediums and applied administration tasks required for industry proficiency. In addition, installation of copper cable systems in conjunction with industry standards will be covered. Training to lead installers to be self sufficient and able to start, run and complete small copper projects.

Lecture: 2 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-1230 Standards and Measurements 2 Credits

Basic course covering electrical codes and industrial standards and manufacturing warranties for the communications transport industry. In addition, industry practices for jurisdictional compliance are included.

Lecture: 2 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-1250 Infrastructure Layout 2 Credits

Course covers the application of math concepts to the communications industry, the interpretation of construction working drawings for worksite requirements and the importance of site surveys. In addition, proposed and actual timelines are discussed.

Lecture: 2 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-1270 Grounding and Bonding 1 Credit

Basic course covering grounding and bonding of active and inactive electronic components required for worker and equipment protection. In addition, governing bodies that oversee the communications industry will be identified and application procedures are covered.

Lecture: 1 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-2010 Information Transport - Fiber 2 Credits

Advanced certification course covering Fiber Optics skills, transmission mediums and administration tasks required for industry proficiency. In addition, installation of Fiber Optic cable systems in conjunction with industry standards will be covered. Course to enable learners to be self sufficient and able to start, run, and complete fiber optic projects.

Lecture: 2 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-2030 Data Theory 1 Credit

Advanced course covering the topology and transmitting information related to signal transmission and transport. In addition, purpose and function of information systems will be discussed.

Lecture: 1 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship programs.

ATCW-2050 Audio Visual

1 Credit

Course covers the types, purpose and functions of audio visual communication systems and discusses transmission fundamentals, including required skills and site preparations. In addition, legal consequences and ramifications with respect to security issues is discussed.

Lecture: 1 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-2070 Information Transport Circuits

1 Credit

Advanced course covering the functions and limitations of transmission signals and the provider equipment and hardware used for information transport. In addition, troubleshooting procedures, tools, and equipment will be discussed.

Lecture: 1 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.

ATCW-2120 Advanced Systems Transport

2 Credits

Certification course covering skills, transmission mediums and administration tasks required for industry proficiency. In addition, installation of cable systems in conjunction with industry standards will be covered.

Lecture: 2 hours

Prerequisite(s): Departmental approval: admission into the CWA apprenticeship program.