

**Core Curriculum: Level One**

**00101-04 Basic Safety (15 Hours)**

Explains the safety obligations of workers, supervisors, and managers to ensure a safe workplace. Discusses the causes and results of accidents and the dangers of rationalizing risk. Reviews the role of company policies and OSHA regulations in maintaining a safe workplace. Introduces common job-site hazards and protections such as lockout/tagout, personal protective equipment (PPE), and HazCom.

**00102-04 Introduction to Construction Math (15 Hours)**

Reviews basic mathematical functions such as adding, subtracting, dividing and multiplying whole numbers, fractions, and decimals, and explains their applications to the construction trades. Explains decimal-fraction conversions and the metric system using practical examples. Also reviews basic geometry as applied to common shapes and forms.

**00103-04 Introduction to Hand Tools (10 Hours)**

Introduces trainees to hand tools that are widely used in the construction industry, such as hammers, saws, levels, pullers, vises, and clamps. Explains the specific applications of each tool and shows how to use them properly. Also discusses important safety and maintenance issues related to hand tools.

**00104-04 Introduction to Power Tools (5 Hours)**

Provides detailed descriptions of commonly used power tools such as drills, saws, grinders, and sanders. Reviews applications, proper use, safety, and maintenance. Many illustrations show power tools used in on-the-job settings.

**00105-04 Introduction to Blueprints (7.5 Hours)**

Familiarizes trainees with basic blueprint terms, components, and symbols. Explains the different types of blueprint drawings (civil, architectural, structural, mechanical, plumbing/piping, and electrical) and instructs trainees on how to interpret and use drawing dimensions. Two oversized drawings are included.

**00106-04 Basic Rigging (20 Elective Hours)**

Explains how ropes, chains, hoists, loaders, and cranes are used to move material and equipment from one location to another on a job site. Describes inspection techniques and load-handling safety practices. Also reviews American National Standards Institute (ANSI) hand signals.

**00107-04 Basic Communication Skills (5 Elective Hours, Must be combined with 00108-04)**

Provides trainees with techniques for communicating effectively with co-workers and supervisors. Includes practical examples that emphasize the importance of verbal and written information and instructions on the job. Also discusses effective telephone and e-mail communication skills.

**00108-04 Basic Employability Skills (15 Elective Hours, Must be combined with 00107-04)**

Identifies the roles of individuals and companies in the construction industry. Introduces trainees to critical thinking and problem solving and computer systems and their industry applications. Also reviews effective relationship skills, effective self-presentation, and key workplace issues such as sexual harassment, stress, and substance abuse.