

**PAINTING – COMMERCIAL & RESIDENTIAL: Level One**

**07101 Careers in the Painting Trade (5 Hours)**

Presents a brief history of the painting trade. Covers career opportunities, from apprenticeship/helper to managerial/business-related work. Describes the characteristics of the successful tradesperson, including productivity, appearance, personal hygiene, and dependability.

**07012 Safety (10 Hours)**

Provides a comprehensive overview of the safety and precautions for working on construction sites with a focus on the painting trade. Covers methods of rigging and care of ladders, scaffolds, swing devices, and other equipment.

**07103 Ladders, Scaffolds, Lifts, and Fall Protection (10 Hours)**

Covers methods of erecting, using and maintaining ladders, scaffolds, and lifts. Discusses fall protection equipment and safety practices used when working on ladders, scaffolds, and lifts.

**07104 Identifying Surface/Substrate Materials and Conditions (5 Hours)**

Covers how to identify types of surfaces used in construction including wood, metal, masonry/concrete, plaster/drywall and synthetic substrates. Also discusses how to identify new, aged, or previously coated surface conditions of substrates and coatings.

**07105 Protecting Adjacent Surfaces (5 Hours)**

Covers the tools, materials, and methods used for protecting adjacent surfaces and areas prior to surface preparation, paint spraying, etc.

**07106 Basic Surface Preparation (15 Hours)**

Covers the tools, materials, and methods used for cleaning, repairing, and penetrating surfaces/substrates in preparation for coating. Describes basic methods used for surface preparation of wood, metal, plaster/drywall, cementations, and synthetic surfaces/substrates.

**07107 Sealants and Repair/ Fillers (5 Hours)**

Describes the characteristics of commonly used types of sealants and fillers. Covers guidelines for selecting sealants/fillers and the tools and methods used for applying them on commonly used construction substrates.

**07108 Introduction to Paints and Coatings (10 Hours)**

Describes the basic ingredients and film-forming processes common to all paints and coatings. Covers paint systems and functional categories of paint and coatings. Emphasizes water-based alkyd paints and coatings.

**07109 Brushing and Rolling Paints and Coatings (15 Hours)**

Covers the types and selection of brushes, rollers, pads, mitts, and related accessories used for applying paints and coatings. Covers techniques used for brushing and rolling paints and coatings on interior and exterior surfaces. Also describes maintenance and storage methods for brushes and rollers.

**PAINTING COMMERCIAL & RESIDENTIAL: Level Two**

**07201            Painting Failures and Remedies (7.5 Hours)**

Covers failures of paints/coatings on exterior and interior substrates, causes of these failures, and their remedies. Focuses special attention on the nature of the substrates, application procedures, and surface preparation.

**07202            Job Planning and Completion (10 Hours)**

Covers the process for estimating a job to submit a bid. Also covers the processes for planning and accomplishing a job from start to finish with emphasis placed on the importance and use of drawings, specifications, schedules, and other instructions.

**07203            Chemical Cleaning and Stripping (7.5 Hours)**

Describes various kinds of chemical cleaners and strippers and how they are used to clean and/or remove unwanted material from substrates.

**07204            Low-Pressure Water Cleaning (7.5 Hours)**

Covers the design and function of commonly used types of low-pressure washing equipment, including procedures for the safe operation and maintenance of typical equipment.

**07205            Abrasive Blasting (7.5 Hours)**

Covers the basic design and function of abrasive blasting equipment, including general procedures for its use, related industry standards, and safety and health considerations.

**07206            Drywall Finishing and Patching (25 Hours)**

Covers the materials and procedures used for drywall finishing and patching. Emphasizes on the techniques for finishing and patching drywall, including the use and care of tools, equipment and supplies, and safety.

**07207            Stains (7.5 Hours)**

Describes the different classes and/or kinds of stains, including their composition, section for use and care of tools, equipment and supplies, and safety.

**07208            Clear Finishes (7.5 Hours)**

Covers the composition, uses, and application of various clear finishes, including varnishes, lacquers, shellacs, and urethanes.

**07209            Wood Finishes (22.5 Hours)**

Covers basic wood science and technology subjects related to wood and wood products. Provides detailed procedures and techniques for wood surface preparation and the application of clear finishes to various kinds of wood.

**07210            Coatings Two (10 Hours)**

Describes unique properties, safety and health considerations, surface preparation, application, and testing and inspection of selected high-performance coatings.

**07211            Spray Painting (32.5 Hours)**

Covers the design and function of commonly used types of conventional, airless, and HVLP spraying equipment, including procedures for the safe operation and maintenance of typical equipment.

**PAINTING – COMMERCIAL & RESIDENTIAL: Level Three**

**07301            Painting Failures and Remedies Two (7.5 Hours)**

Covers how to recognize and remedy paint/coating failures caused by improper preparation and application of coatings, as well as coating discoloration.

**07302            Job Supervision, Planning, and Control (15 Hours)**

Covers skills and leadership traits associated with the successful supervisor, including how to supervise and motivate employees, how to estimate a job, the use of contract documents, and methods for controlling materials and tools/equipment.

**07303            Coatings Three (15 Hours)**

Describes unique properties, safety and health considerations, surface preparation, application, and testing, and inspection of high-performance coatings used primarily to protect substrates for commercial or light industrial applications.

**07304            Color and Tinting (10 Hours)**

Covers the theory and definition of color; procedures for mixing, tinting, and matching colors; the use of the color wheel; and the Munsell, Federal Standard 595B, and other color systems.

**07305            Decorative (Faux) Finishes (22.5 Hours)**

Describes the techniques for creating glazing antiqing, stippling, mottling, gilding, marbling, and graining decorative finishes.

**07306            Wallcovering (40 Hours)**

Covers the wallcovering process from start to finish. Includes equipment and materials, estimating methods, surface preparation, adhesives and installation, and failures and remedies.

**07307            Graphics (12.5 Hours)**

Covers types of graphics and their uses, methods of transferring graphic patterns to a surface, building code regulations, and other factors in the use of graphics.

**07308            Texturing (10 Hours)**

Covers the characteristics of various texturing materials, surface preparation procedures, and techniques for producing different patterns.

**07309            Spraying with Special Devices (20 Hours)**

Covers the design and function of texture, cold roof coating, electrostatic, and plural component spraying equipment. Includes procedures for the safe operation and maintenance of typical equipment.

**PAINTING – COMMERCIAL & RESIDENTIAL: Level Four**

**07401 Safety (10 Hours)**

Provides a comprehensive overview of the safety rules and precautions for working on construction sites, with a focus on the industrial painting trade and applications.

**07402 Ladder, Scaffolds, Lifts, and Fall Protection (15 Hours)**

Describes methods for erecting, using, and maintaining ladders, scaffolds, and lifts. Covers fall protection equipment and safety practices used when working on ladders, scaffolds, and lifts.

**07403 Containment/Ventilation (7.5 Hours)**

Introduces the methods used for limiting dust, debris, hazardous material, etc., from contaminating the environment and injuring people. Bases content on the monitoring components and methods recommended in SSPC-Guide 6 (CON). Covers ventilation methods used for the control of emissions released to the atmosphere and to protect the worker within a containment enclosure.

**07404 Surface Preparation One (15 Hours)**

Covers the tools, materials, and methods used for cleaning and preparing surfaces/substrates by solvent cleaning, hand tool cleaning, and power tool cleaning methods. Bases content on the methods and procedures specified by the following SSPC/NACE standards: SSPC-SP1, SSPC-SP2, SSPC-SP3, SSPC-SP11, and SSPC-SP13/NACE 6.

**07405 Surface Preparation Two (20 Hours)**

Covers the tools, materials, and methods used for cleaning and preparing surfaces/substrates using various types of abrasive blasting equipment. Bases content on the methods and procedures specified by the following SSPC/NACE standards: SSPC-SP5/NACE 1, SSPC-SP10/NACE 2, SSPC-SP6/NACE 3, SSPC-SP7/NACE 4.

**07406 Surface Preparation Three (7.5 Hours)**

Covers the tools, materials, and methods used for cleaning and preparing surfaces/substrates by chemical stripping, pickling, high-pressure water-jetting, and ultra high-pressure water jetting. Bases content on the methods and procedures specified by the following SSPC/NACE standards: SSPC-SP8 and SSPC-SP12/NACE 5.

**07407 Industrial Coatings (12.5 Hours)**

Covers the basic ingredients and film-forming processes common to all paints and coatings and describes paint systems and the different functional categories of paints and coatings. Introduces the unique properties, safety and health considerations, and surface preparation and application of high-performance coatings used to protect substrates for industrial applications.

**07408 Coatings Applications and Equipment (25 Hours)**

Covers the equipment and methods: brushes and rollers, conventional sprayers, airless and air-assisted sprayers, high-volume low pressure (HVLP) sprayers, electrostatic sprayers, plural component proportioning equipment, wire flame and wire arc sprayers, and dry powder coating application process.

**07409 Quality Inspections (15 Hours)**

Introduces the various formal quality control tasks and procedures used to govern the quality and acceptance of work performed by those in the industrial painting industry. Also describes the methods, equipment, and test instruments used to perform tasks in accordance with the requirements of the various ASTM and SSPC/NACE standards governing quality control and quality assurance.

**07410 Coatings Failure and Analysis (7.5 Hours)**

Covers how to recognize failures of paints/coatings on exterior and interior substrates, causes of these failures, and their remedies. Focuses special attention on the nature of the substrates, application procedures, and surface preparation.

**07411 Specialty Materials (7.5 Hours)**

Describes the characteristics and types of sealants and fillers commonly used in industrial application. Covers sealers and putties used in conjunction with tank and vessel reinforced lining systems, as well as fire resistant and fire retardant sealing materials. Gives guidelines for selecting the materials covered, along with the tools and methods used for applying them on steel, concrete, and other construction substrates.