

Description

This course is a comprehensive and intensive four day course which aims to provide delegates with a firm foundation in the technology of organic surface coatings. The course gives an overview of the raw materials used in surface coatings and their contribution to the final properties of the coatings. The study of coating systems emphasises the changes taking place in modern technology.

Who Should Attend

This course has been designed for newcomers to the industry who need a firm foundation in the technology of organic surface coatings. To gain maximum benefit from the course it is helpful if delegates have a knowledge of chemistry to university entrance standard.

Contents

Introduction to Paint & Surface Coatings Technology

Markets for Coatings

Substrates

- Wood
- Masonry
- Metal
- Plastic

Properties of Coatings

- Optical properties
- Mechanical properties
- Rheology

Raw Materials

- Organic film formers
- Pigments, pigmentation & the dispersion process
- Solvents and solubility & the film formation process

Waterborne & High Solids Coatings

- Specific raw materials
- Types and example formulations
- Uses

Radiation Cured Coatings

Surface Preparation

- Cleaning
- Pre-treatment

Solventborne Coatings

- Specific raw materials
- Types and example formulations
- Uses

Coatings Application Methods

- Brush
- Roller
- Spray (air, airless, HVLP, etc.)
- Dip, flow, curtain, roller
- Electrostatic discs and bells

Powder Coatings

- Types
- Uses
- Application methods

Microbiology of Coatings

- Plant hygiene
- Aqueous paints
- Applied films
- Preservation and protection
- Microbial testing