

# PU 102A: Flexible Polyurethane Market Overview

## Course Description:

This course provides an overview of the flexible polyurethane foam market, including key materials, processing methods, and product types. Participants will review essential chemistry concepts, explore raw materials such as polyols, isocyanates, and additives, and learn how flexible foams are produced using various technologies. The course also covers foam properties, testing methods, and major applications including bedding, furniture, transportation, and technical products.

## Flexible Polyurethane Foam Market

## Polyurethane Chemistry Refresher

## Foam Test Methods: How to Characterize

## Raw Materials

- Polyols
- Isocyanates
- Surfactants
- Catalysts
- Additives

## Flexible Foam processing

- Conventional Slabstock
- CO<sub>2</sub> Foaming
- Variable Pressure Foaming
- Molded Foam

## Types of Foam

- Conventional Foams
- High Resilience (HR) Foams
- Combustion Modified HR Foams (CMHR)
- High Load Bearing Foams
- Soft/Supersoft Foams
- Viscoelastic Foams
- Specialty Foams

## Applications

- Bedding
- Furniture/Seating
- Carpet Cushion

- Transportation
- Technical Products