

# INTERMEDIATE NONWOVENS TRAINING COURSE

Instructor, Ed Thomas

Head of Research and Product Development

First Quality, Fiberweb, (retired)

## COURSE AGENDA

### Day 1

### Tuesday

8:30 am  
9:00 am  
9:10 am  
9:20 am

CONTINENTAL BREAKFAST

Introduction

Welcome

Program Preview

*Video overview, nonwoven markets and product applications, information sources.*

The World of Nonwovens

*"Hands-on" examination of nonwoven fabric and end-use product samples as a means to illustrate the wide range of nonwoven usage.*

Establishment of "Analysis Teams and Tasks."

12:00 pm

LUNCH

1:00 pm

Nonwovens Technology Primer

*Definitions of nonwovens, short history of the technical evolution of the industry. Description of basic nonwoven manufacturing principles and systems.*

Fiber Fundamentals

*Generic types and characteristics, property comparisons, raw material-fabric property relationships.*

5:00 pm

Reception and "Analysis Team Bonding"

6:00 pm

ADJOURNMENT (evening on your own)

INDA

DAVE ROUSSE, INDA

DAVE NELSON, NCSU

EDWARD THOMAS, INSTRUCTOR

EDWARD THOMAS, INSTRUCTOR

INDA

EDWARD THOMAS, INSTRUCTOR

EDWARD THOMAS, INSTRUCTOR

**Day 2**

**Wednesday**

8:30 am	CONTINENTAL BREAKFAST Analysis Team Work and Discussion Session	INDA
9:00 am	Web Forming Technologies – Drylaid Nonwovens <i>Analysis of carding and staple fiber airlaid systems. Review of background, process technologies and recent developments.</i>	DAVE NELSON, INSTRUCTOR
	Web Forming Technologies - Wetlaid and Short Fiber Airlaid Nonwovens <i>Development of wetlaid nonwovens based on paper technology. Unique characteristics of cellulose fibers in wetlaid technology. Development of short fiber airlaid nonwovens and comparison of short fiber airlaid nonwovens technology with wetlaid nonwovens technology.</i>	EDWARD THOMAS, INSTRUCTOR
11:00 am	Travel to Nonwovens Institute	
11:30 am	Nonwoven Institute Welcome	DAVE NELSON, INSTRUCTOR
11:40 am	Web Forming and Bonding Technologies - “Polymer to Fabric” Nonwovens <i>Basic principles associated with spunbond, meltblown and film-based nonwovens and the polymers used in their production.</i>	DAVE NELSON, INSTRUCTOR
12:30 pm	LUNCH	NONWOVENS INSTITUTE
1:15 pm	Web Forming and Bonding Technologies (continued) Systems for Spunlaced/ Hydro-entangled nonwovens.	BEHNAM POURDEYHIMI, INSTRUCTOR
3:00 pm	Staple and Polymer Lab Discussion	DAVE NELSON, INSTRUCTOR
3:20 pm	Staple and Polymer Lab Tours and Demonstrations	DAVE NELSON, INSTRUCTOR
5:25 pm	ADJOURNMENT (evening on your own)	

### **Day 3**

### **Thursday**

8:30 am	CONTINENTAL BREAKFAST	INDA
	Analysis Team Work and Discussion Session	
9:00 am	WEB BONDING TECHNOLOGIES I <i>Mechanical bonding principles and systems.</i>	EDWARD THOMAS, INSTRUCTOR
	WEB BONDING TECHNOLOGIES II <i>Chemical and thermal bonding principles and systems.</i>	EDWARD THOMAS, INSTRUCTOR
	NONWOVEN FABRIC FINISHING & CONVERTING <i>Principles, processes, and methods used to treat nonwoven fabrics to obtain.</i>	
12:00 pm	TRAVEL TO NONWOVENS INSTITUTE	
12:30 pm	Lunch	NONWOVENS INSTITUTE
1:15 pm	NONWOVEN FABRIC TEST METHODS AND PROCEDURES	AMY MINTON, LAB MANAGER
2:00 pm	TEST METHODS <i>Overview of nonwoven test methods and standardization of test procedures.</i>	AMY MINTON, LAB MANAGER
3:00 pm	TEST LAB TOURS AND DEMONSTRATIONS	AMY MINTON, LAB MANAGER
5:25 pm	ADJOURNMENT (evening on your own)	

### **Day 4**

### **Friday**

8:15 am	CONTINENTAL BREAKFAST	INDA
8:45 am	FUTURE TRENDS <i>Projection of future applications and developments in manufacturing materials, processes and products.</i>	BEHNAME POURDEYHIMI, INSTRUCTOR
9:30 am	ANALYSIS TEAM PRESENTATIONS	EDWARD THOMAS, INSTRUCTOR
10:30 am	BREAK	
	HOT TOPICS <i>Latest information regarding flushable wipes and single-use plastics.</i>	DAVE ROUSSE, INDA
10:45 am		
11:15 am	NONWOVENS MARKETS STATISTICS, TRENDS & DIRECTIONS	BRAD KALIL, INDA
12:15 pm	LUNCH/COURSE ADJOURNMENT	INDA
	<i>Please exchange a completed evaluation for your certificate.</i>	