



Intermediate Nonwovens Training Course COURSE AGENDA

Instructor: Ed Thomas
Head of Research and Product Development,
First Quality, Fiberweb, (retired)

Day 1: Tuesday

8:30 am	Continental Breakfast	INDA
9:00 am	Introduction	Dave Rouse, INDA
9:10 am	Welcome	Dave Nelson, NWI
9:20 am	Program Preview Video overview, nonwoven markets and product applications, information sources.	Ed Thomas, Instructor
	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.”	Ed Thomas, Instructor
12:00 pm	Lunch	INDA
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.	Ed Thomas, Instructor
	Fiber Fundamentals Generic types and characteristics, property comparisons, raw material-fabric property relationships.	Ed Thomas, Instructor
5:00 pm	Reception and “Analysis Team Bonding”	
6:00 pm	Adjournment (evening on your own)	



Day 2: Wednesday

8:30 am	Continental Breakfast	INDA
	Analysis Team Work and Discussion Session	
9:00 am	Web Forming Technologies - Drylaid Nonwovens Analysis of carding and staple fiber airlaid systems. Review of background, process technologies and recent developments.	Dave Nelson, NWI
	Web Forming Technologies - Wetlaid & Short Fiber Airlaid Nonwovens 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.	Ed Thomas, Instructor
11:15 am	Travel to Nonwovens Institute	
11:45 am	Nonwoven Institute Welcome	Dave Nelson, NWI
11:55 am	Web Forming & Bonding Technologies - "Polymer to Fabric" Nonwovens Basic principles associated with spunbond, meltblown and film-based nonwovens and the polymers used in their production.	Behnam Pourdeyhimi, NWI
12:45 pm	Lunch	Nonwovens Institute
1:30 pm	Web Forming and Bonding Technologies (con't) Systems for Spunlaced/ Hydro-entangled nonwovens.	Behnam Pourdeyhimi, NWI
3:15 pm	Staple & Polymer Lab Discussion, Tours & Demonstrations	Dave Nelson, NWI
5:25 pm	Adjournment (evening on your own)	



Day 3: Thursday

8:30 am	Continental Breakfast Analysis Team Work and Discussion Session	INDA
9:00 am	Web Bonding Technologies I Mechanical bonding principles and systems.	Ed Thomas, Instructor
	Web Bonding Technologies II Chemical and thermal bonding principles and systems.	
	Nonwoven Fabric Finishing & Converting Principles, processes, and methods used to treat nonwoven fabrics to obtain enhanced physical and aesthetic properties for specific end-use.	
12:15 pm	Travel to Nonwovens Institute	
12:45 pm	Lunch	Nonwovens Institute
1:30 pm	Nonwoven Fabric Test Methods & Procedures	Amy Minton, NWI
2:15 pm	Test Methods Overview of nonwoven test methods and standardization of test procedures.	
3:15 pm	Test Lab Tours and Demonstrations	Amy Minton, NWI
5:25 pm	Adjournment (evening on your own)	



Day 4: Friday

8:15 am	Continental Breakfast	INDA
8:45 am	Future Trends Projection of future applications and developments in manufacturing materials, processes and products.	Behnam Pourdeyhimi, NWI
9:30 am	Analysis Team Presentations	Ed Thomas, Instructor
10:30 am	Break	
10:45 am	Hot Topics “Sustainability: Trends in Nonwovens: A look at Absorbent Hygiene”	Dave Rouse, INDA
11:15 am	Nonwovens Markets Statistics, Trends & Directions	Brad Kalil, INDA
12:15 pm	Lunch/Course Adjournment Please exchange a completed evaluation for your certificate.	INDA