Keep abreast of developments in the manufacture, conversion and applications of nonwovens. The Nonwovens Learning Cycle™, organised in collaboration with CETI, offers an integrated approach to nonwovens from the basics, via intermediate, to advanced courses in Meltblown, Spunlaid, Carding.
## Programme & Timing

### DAY 1

Registration on the 1st day opens at 8.30  
Each day the course starts at 9.00 and finishes at 17.00

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>09.00</td>
<td>Introduction and welcome</td>
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<tr>
<td></td>
<td>Welcome from EDANA, introductions of tutors and delegates</td>
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<tr>
<td></td>
<td><strong>INTRODUCTION OF NONWOVENS</strong></td>
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<tr>
<td></td>
<td>Definition and applications of Nonwovens, review of the overall programme</td>
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<tr>
<td>10.30</td>
<td>Coffee break</td>
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<tr>
<td>10.30</td>
<td><strong>WEB FORMING TECHNOLOGIES</strong></td>
</tr>
<tr>
<td></td>
<td>Overview of background, process concepts and recent developments</td>
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<td></td>
<td><strong>DRYLAID NONWOVENS</strong></td>
</tr>
<tr>
<td></td>
<td>Carding and long fibre airlaid, including fibre characterisation and fibre opening</td>
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<tr>
<td>12.30</td>
<td>Lunch</td>
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<tr>
<td>12.30</td>
<td><strong>WETLAID AND SHORT FIBRE AIRLAID</strong></td>
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<tr>
<td></td>
<td>Development of wetlaid nonwovens from paper technology, comparison with short fibre airlaid</td>
</tr>
<tr>
<td>15.00</td>
<td>Coffee break</td>
</tr>
<tr>
<td>15.00</td>
<td><strong>WEB FORMING TECHNOLOGIES – POLYMER TO WEB</strong></td>
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<tr>
<td></td>
<td>Evaluation of the principal concepts of spunlaid, meltblown, and submicron spinning</td>
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<tr>
<td>19.30</td>
<td>Delegates’ get-together</td>
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<tr>
<td></td>
<td>This get-together dinner is offered by EDANA</td>
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</tbody>
</table>
**INTEGRATED COURSE**

**PROGRAMME & TIMING**

**DAY 2**

09.00  WEB CONSOLIDATION TECHNOLOGIES
Overview of background, process concepts and developments in bonding technologies

CHEMICAL BONDING
Binders used

THERMAL BONDING
Calendering, through-air

10.30  Coffee break

MECHANICAL BONDING
Needlepunch, hydroentanglement

FINISHING
Winding, slitting, post treatments

12.30  Lunch

**RAW MATERIALS FOR NONWOVENS**
Overview of fibres and fibre classification, properties of different fibres
Choice of fibres in relation to product characteristics
Introduction of different polymers used for ‘in situ’ fibre production
Additives for special properties

15.00  Coffee break

**NONWOVEN TEST METHODS**
Introduction of the Nonwoven Standard Procedures (NWSP)

**NONWOVEN MARKET**
Presentation of the latest available EDANA Statistics

**GROUP EXERCISE**
Analyse a nonwoven based product

**DAY 3**

09.00  Departure to R&D installations by bus
Visit to CETI (Centre Européens des Textiles Innovants) in Tourcoing (France)

10.30  Tour at CETI
The visit will allow the participants to actually see most of the concepts which have been explained during the course

12.00  Lunch

14.30  End of the visit and departure
Arrival at Brussels Airport around 16.30 hrs
Arrival at EDANA offices around 17.00 hrs

*THIS PROGRAMME IS SUBJECT TO ALTERATIONS*
WHO SHOULD ATTEND?
Both technical and marketing persons will benefit from attending this course as they are likely to be involved with producers, suppliers, converters and retailers within the industry.

COURSE ORGANISER
This course is organised by EDANA. The association is sponsor of INDEX, the world’s largest nonwovens exhibition. EDANA has over 320 member companies in 39 countries.

COURSE TUTORS
Marines Lagemaat, Scientific and Technical Affairs Director at EDANA, will host the course and deliver the training together with external expert Olivier Guichon, Consultant Nonwoven Process Expert at RH Solutions.

LANGUAGE
The course language is English. The tutors will speak clearly and make extensive use of visual aids, videos and samples. Active participation is encouraged from all delegates.

NUMBERS
Each course is limited to 20 delegates.

VENUE
The course will take place at EDANA, 46 Avenue Herrmann-Debroux, 1160 Brussels, Belgium, if the sanitary situation allows. If not, the course will take place online.

SANITARY SITUATION
Please refer to the training course webpage and the available information to know more about the sanitary measures in place at EDANA for all face-to-face training courses.

ACCOMMODATION
EDANA has reserved a number of single rooms at the NH Collection Brussels Centre at a special rate of about €175 per night, including breakfast. In order to receive this special rate, an hotel booking link will be provided to you once we have received your registration for the course.

REGISTRATION FEE
The fee includes comprehensive delegate notes, samples, visit of pilot lines in Tourcoing, lunches, one evening meal and coffees.

<table>
<thead>
<tr>
<th>Category</th>
<th>Fee (excl. VAT)</th>
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</thead>
<tbody>
<tr>
<td>EDANA members</td>
<td>1650€</td>
</tr>
<tr>
<td>Non-members</td>
<td>1950€</td>
</tr>
</tbody>
</table>

For further information, please contact:
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For more information about edana, please visit our website: [www.edana.org](http://www.edana.org)