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, to intermediate, to advanced courses in Meltblown, Spunlaid, Carding, to guided development.
**DAY 1**

**08.30**  
Welcome to CETI  
SPUNLAID PROCESS OVERVIEW  
- Market Statistics  
- Innovations on Nonwovens fabrics  
- Evaluation of the principal concepts of spunbond and meltblown  

PREPARATION OF RAW MATERIALS  
- Polymers properties used in spunbond and meltblown fabrics  
- Biopolymers – recent developments  

SPUNBOND AND MELTBLOWN PROCESS  
- From the spinning to the web forming  
- Main processes Parameters (configuration, regulation, principles, speed)  

**12.30**  
Lunch break  

**13.30**  
WEB CONSOLIDATION TECHNOLOGIES  
- Process concepts and developments  
- Properties overview in regards to the functionalities needed and uses of the end-product.  
- Mechanical Bonding: Needlepunch – hydroentanglement  
- Thermal Bonding: Calendering – Through-air  

BI-COMPONENT FIBERS  
- Best match maker: Main markets and recent applications  
- Process concepts and developments  
- Microfibers nonwovens  

**18.00**  
Hotel break  

**19.30**  
Evening dinner
PROGRAMME & TIMING

DAY 2

08.30  
LIVE PROTOTYPING OF NONWOVENS FABRICS  
TRIALS USING SPUNBOND PROCESS AND WEB BONDING TECHNOLOGY  
- Learn to select the correct technology to meet product performance and attribute requirements  
- Comparison of the main Spunbond parameters process  
- Analyse a nonwoven based product

12.30  
Lunch break

TRIALS USING MELTBLOWN PROCESS AND WEB BONDING TECHNOLOGY  
- Learn to select the correct technology to meet product performance and attribute requirements  
- Comparison of the main Meltblown parameters process  
- Analyse a nonwoven based product

16.30  
End of the course

Contact anaelle.schutz@edana.org
WHO SHOULD ATTEND?
Process engineers, Product Managers, Raw Materials managers, R&D managers, QA managers. Such people are likely involved with producers, suppliers, converters and retailers within the industry.

COURSE ORGANISER
This course is part of ‘My nonwovens learning cycle’ which is a joint development from EDANA and CETI

COURSE TUTOR
Javier Vera-Sorroche: Director of the Polymer Business Unit at CETI, he comes from a strong R&D plastics processing background. His core competences include: melt spinning, nonwoven, extrusion and optimization, compounding and polymer rheology. He holds a Master of Science in Chemical Engineering from the University of Murcia, Spain, and PhD in Polymer Extrusion from the University of Bradford, United Kingdom.

LANGUAGE
The course language is exclusively in English.

METHODOLOGY
A course based on the combination of class room training, information exchange and interaction with the R&D engineer and technicians. Use of different support: video, pictures, samples, pilot line.

NUMBERS OF PARTICIPANTS
Each course is limited to 6 delegates for optimal interaction between the participant and the CETI staff during the course and the workshop on the platform in operation.

LEVEL OF THE COURSE
In order to fully benefit from this course it is recommended to have a good understanding of nonwovens manufacturing. It is recommended to attend the Nonwovens training course before joining any of the advanced courses.

VENUE
CETI – 41 rue des Métissages
F-59200 Tourcoing
(25 min by car from Lille City Center)

ACCOMMODATION
A list of hotels will be provided to delegates once we have received their registration.

REGISTRATION FEE
(The fee includes, two lunches, dinner after day 1)
* EDANA members: € 2310 excl. VAT/person
* Non-members: € 2860 excl. VAT/person

REGISTRATION AND CONTACT
The registration of all courses in THE NONWOVENS LEARNING CYCLE is handles by EDANA.
Please find registration forms as well as contact details on www.edana.org.

FACT FILE

For more information about edana, please visit our website: www.edana.org