This course is designed for professionals with a Bachelor of Science degree in engineering, technical or textiles, and a minimum of one year experience with engineered fabrics. The course provides the fundamentals of the electrospinning method for the production of high quality nonwoven-structured micro and nanofiber layers relevant to many applications such as filtration and separation, biomedicine, composites, catalysis, and smart fabrics.

Instruction focuses on the raw materials, technologies, tests, and evaluations used to create end use products. You will gain insight into the industry with market forecasts and learn more about the significant role these materials will play in the engineered fabrics and other industries; and gain hands-on experience creating these incredible materials using NWI’s state-of-the-art facility.

### TOPICS COVERED INCLUDE:
- Nonwoven related micro and nano-fiber end products - when and why to use nanofibers in:
  - Air and liquid filters
  - Hygiene products
  - Wound care materials
  - Protective garments
  - Sound absorption
  - Solar cells
  - Batteries
  - Fuel cells
  - Catalysis testing and evaluation of nanofiber materials
- Polymer properties and fiber formation
- Polymers used in electrospinning from both solvents and melts
- Familiarization with the nozzle and nozzleless electrospinning processes
- Composite materials with unique properties
- Post-processing methods leading to new ceramic nanofiber materials

### WHEN
April 18-21, 2017

### WHERE
NC State University
The Nonwovens Institute
1000 Main Campus Drive
College of Textiles Building
Suite 2418
Raleigh, NC 27606

Multiple registrants from the same company receive a discount.