# **Nonwovens (Minor)**

Nonwovens is a highly interdisciplinary and growing industry. It covers a wide range of products and usages, from filtration systems for purifying air, blood and water, to various types of wipes, medical textiles, geotextiles, etc. This program will allow students to take classes that deal with nonwoven processes and products as well as be exposed to all the equipment.

The nine hours of required courses provide a comprehensive overview of nonwoven products and processes, including materials, various manufacturing techniques and product/process/property interactions. Six elective hours may be chosen from fiber formation, nonwoven characterization methods, nonwoven product development, and research experience in nonwoven science and technology. Upon completing this minor, students will 1) demonstrate competency in the principles and concepts of nonwoven process and product technology and 2) develop skills to analyze and solve real-world problems and build abilities to develop new and innovative structures made from fibers, polymers and other relevant materials.

### **Admissions**

The Minor in the Science of Nonwovens is available to all undergraduate students enrolled in the university as degree candidates. To be admitted to the program, students must have a GPA of at least 2.0. Application for admission to any university minor program is now available via MyPack Portal. Admission will be based upon the student's academic record, and in most cases no longer requires departmental review. Go to Add a Minor to apply.

#### Certification

Dr. Eunkyoung Shim is the advisor and certifies completion of the minor. The minor must be completed no later than the semester in which the student expects to graduate from his or her degree program.

#### Contact Person

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Effective Date: 1/2023

SIS Code: 18NONWOVM

## **Plan Requirements**

All courses taken to complete this minor must be completed with a grade point average of 2.0 or higher.

| Code             | Title   | Hours |  |
|------------------|---|-------|--|
| Required Courses |   |       |  |
| TE 201           | Fiber Science   | 3-4   |  |
| TMS 211          | Introduction to Fiber Science (TMS211 can substitute TE201) |       |  |
| TT 404           | Introduction to Nonwovens Products and Processes            | 3     |  |

| TT 405                 | Advanced Nonwovens Processing               | 3     |
|------------------------|---|-------|
| <b>Elective Course</b> | es  |       |
| Select six credit      | hours of the following:                     | 6     |
| TT 407                 | Characterization Methods in Nonwovens       |       |
| TT 408                 | Nonwoven Product Development                |       |
| NW 497                 | Research Experience in Nonwoven Science and | l     |
|                        | Technology (New course proposed )           |       |
| <b>Total Hours</b>     |   | 15-16 |

**Note:** Some of these courses have prerequisites. Permission to waive prerequisites must be obtained from the course instructor after evaluation of student's academic background.