

# TATM

Department of Textile and Apparel,  
Technology and Management

[www.tx.ncsu.edu](http://www.tx.ncsu.edu)

## Graduate Programs

### *Master of Science and Master of Textiles*

#### **Introduction**

The textile industry is involved with more than producing fabric and apparel. Composites, artificial organs, fireproof materials, tire sections and computer circuit boards are just a few of the modern products in the textile industry. More than 150,000 people have been implanted with a knitted polyester artery developed at the COT. The industry continues to need more college graduates with skills in design, engineering, electronics, chemistry, management, computers, apparel, marketing/sales and quality control.

The Textile and Apparel, Technology and Management (TATM) department includes a Digital Design lab, which specializes in 3D Body Scanning, Direct Digital Printing, Whole Body Knitted Garments, and Computer Aided Apparel and Fabric Design. In addition to the design lab the Sara Lee Knit Products Apparel Lab, a Braiding Lab and a Weaving Lab allows students to experience hands on management of advanced textile technology.

Research activities in the department encompass almost all areas of the fiber, textile, and apparel complex. Research ranges from fine structure of fibers to enterprise management. Our graduate students play a very important role in research and most work on these projects as research assistants.

#### **The Degrees**

The Department of Textile and Apparel, Technology and Management (TATM) offers the Master of Science in Textiles and the Master of Textiles degrees. Textiles includes the design, management, and technology of fiber based products and processes. Textile design students explore issues in new product development, body scanning, direct digital printing, computer animation, and computer aided design (CAD). Textile management includes such topics as business intelligence, business finance, information systems, international marketing, supply chain management, and total quality management. Medical textiles, industrial fabrics, three dimensional textile structures, aerospace applications, and smart textiles are examples of new areas for textile technology.

The objective of the Master of Science in Textiles is to develop the student's potential for research and the technical and analytical skills needed for the design of new products and processes and for careers in the textile supply chain, in research laboratories, in government agencies, and in higher education. The MS degree is a thesis-based 36 credit hour program where students conduct independent investigation. Students may specialize in the following areas: advanced fibrous structures, medical textiles, nonwovens, textile product design, textile technology, and textile technology management. Students interested in continuing with a Ph.D. are encouraged to pursue the MS degree.

The objective of the Master of Textiles is to provide on and off-campus students with an opportunity to strengthen their educational background and prepare them for productive careers in the textile supply chain, in research laboratories, in government agencies and in higher education. The Master of Textiles is a non-thesis degree. The program is flexible to accommodate a breadth of student needs. The program can be completed in only two semesters of full-time on campus study. The program is also available entirely via distance education (TOP: Textiles Off-Campus Programs) and may be completed on a part time basis. The university residency requirement is waived for this distance education program. The degree requires 30 credit hours of study with a final oral examination.

#### **Admission Requirements**

Students with a Bachelor of Science or a Bachelor of Arts degree may apply to either of the degree programs. Students apply with degrees in textiles, engineering, management, or design. Typically the minimum acceptable overall grade point average is a 3.0 out of 4.0. Students should have 20 credit hours from mathematics and the natural sciences in their undergraduate degree.

Graduate courses in advanced fibrous structures, medical textiles, and some advanced textile technology courses may require advanced mathematics or science courses. All applicants must submit GRE scores. The GMAT is not acceptable. A satisfactory score on the

TOEFL exam is required of international students.

#### **Assistantships**

Assistantships may be available for students admitted to the Master of Science program in the department.

#### **ITT Fellows Program**

Beginning in the fall of 2003, the Institute of Textile Technology (ITT) and the North Carolina State University (NCSU) College of Textiles launched an education alliance. This alliance allows ITT Fellows to pursue a Master of Science degree at NCSU while also participating in non-credit ITT educational activities including (a) seminars, (b) plant trips, (c) training and practice in presentation and leadership skills, and (d) summer internships. Each ITT Fellow will be awarded a *full scholarship* to cover tuition and fees and a *non-service fellowship*. For more information on the ITT Fellows program visit the web site [www.itt.edu](http://www.itt.edu) or call ITT at (919) 513-7589.

#### **Global Supply Chain Management Fellows Program**

The Global Supply Chain Management Fellows program educates students at the master's level on the design and management of global textile supply chains. This program is a joint offering among Hong Kong Polytechnic University (HKPU), Ecole Nationale Supérieure des Arts et Industries Textiles (ENSAIT), and North Carolina State University (NCSU). Subjects include general supply chain management, information technology, global business, merchandising, quality management and textile technology. Also, each institution offers a global perspectives course wherein students meet textiles executives and visit textiles and apparel companies in the host country.

#### **Contact Information**

For more information on graduate programs in TATM visit the web site <http://www.tx.ncsu.edu/departments/tatm/recruiting/index.html> or contact Dr. Abdel-Fattah Seyam, Director of Graduate Programs, TATM Department 2401 Research Drive, CB 8301 Raleigh, North Carolina 27695-8301 Phone: (919) 515-6583 Fax: 515-3733 E-mail: [a\\_seyam@ncsu.edu](mailto:a_seyam@ncsu.edu)