B.S. Textile Product Science

Kanbar College | School of Design & Engineering



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Marcia Weiss

FASHION & TEXTILES FUTURES CENTER, Director

BS IN TEXTILE DESIGN FROM PHILADELPHIA COLLEGE OF TEXTILES AND SCIENCE MFA IN FIBERS FROM SAVANNAH COLLEGE OF ART AND DESIGN



Marcia.Weiss@jefferson.edu





PROGRAM DESCRIPTION

The Bachelor of Science in Textile Product Science (TPS) prepares students to work in a global industry that includes fiber-engineered products for medical, geotextiles, architecture, fiber-reinforced composites and traditional apparel and home-furnishing applications. The TPS program is comprised of thirteen (13) core textile courses, which delineate all TPS majors.

The true interdisciplinary nature of Textile Product Science is realized in the student's ability to select advanced work in one of the five, 9-course concentrations. The concentrations include: Sports & High Performance, Product Safety & Materials Evaluation, Commerce, Textile Conservation & Forensics and Sustainability.

Another dimension of the program is to educate and graduate fully integrated individuals who possess the technical and social competence and confidence to **succeed in professional practice and advanced education**, be lifelong learners and exercise responsible stewardship.

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Total: 130-133 credits

First Year (33-36 credits)

Major Core

- Fiber and Yarn Studies
- Knit Technology or Weave Technology I
- Introduction to Digital Imaging or Engineering Drawing
- Introduction to Computers

DEC Core

- Integrative Design Process

Hallmarks Core

- Pathways Seminar
- Writing Seminar I
- Debating U.S. Issues
- Science: General Chemistry or Chemistry I Lecture and Lab
- General Physics or Physics I Lecture and Lab or Chemistry II Lecture and Lab
- Mathematics
- Physical Education or Service Learning

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Second Year (33 credits)

Major Core

- Weave Technology I or Knit Technology I
- Weave Technology II or Knit Technology II
- Organic/Textile Chemistry

- [2] Concentration Courses

DEC Core

Science (Select one DECSYS)Framework: Business Models

Hallmarks Core

- Ethics
- Global Diversity
- Writing Seminar II

Third Year (34 credits)

Major Core

- Weave Technology II or Knit Technology II
- Nonwovens
- Color, Dyeing & Finishing Lecture and Lab
- Textile Materials
 Seminar: Textile/ Apparel Industry Issues

[2] Concentration Courses

DEC Core

- Integrative Seminar: Ethnographic Research Methods

Hallmarks Core

- American Diversity
- Global Citizenship
- Debating Global Issues

Fourth Year (30 credits)

Major Core

- Capstone in Textile Product Science

PLAN OF STUDY

- [3] Concentration Courses (9 credits)
- [4] Free Electives or Minor (12 credits)

Hallmarks Core - Capstone Folio Workshop



SAMPLE STUDENT WORK



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GRADUATION RATE

PLACEMENT RATE

100% 97%

RANKINGS

#1 Oldest textile university in the United States, founded in 1884.

TOP TEN Ranked with our fashion and textile programs as #3 in the US and #7 in the world.

BEST Collaborative spaces with extensive testing facilities in the **Bruner Materials Characterization** Laboratory.

AWARDS

- American Association of Textile Chemists and Colorists Scholarship Award
- Mimaki Project: Market Exploration Award
- US Olympic Luge Team Suit: Textile Development • for 2022 Winter Olympic Games

EMPLOYERS OF JEFFERSON GRADUATES



Vice President of Technical Innovation

OUTLOOK

Entering the industry with an educational background in Textile Product Science, there exists an exciting range of opportunities to pursue. International fabric sourcing, manufacturing quality certification, textile innovation and new business development for biomedical, contract interiors, geotextiles and so much more are all careers held by Textile Product Scientists. With your global vision, the sky is the limit.

SALARIES





Association for Contract Textiles

• International association of companies in the design, development and production of textiles for commercial interiors.

- National Council of Textile Organizations
 - National association to mobilize support for the US textile industry.

• American Association of Textile Chemists and Colorists

• Internationally recognized association of experts in materials characterization.



Bennett Purdy

ITHACA, NY CLASS OF 2021

Bennett is a Textile Product Science senior. Very engaged with textile activities, Bennett has had great internships with MTL (Jessup, PA) in fabric and yarn quality assurance and with GJ Littlewood & Son (Philadelphia, PA) as a dye technician.

"I got interested in textile science after working with a small studio doing hand weaving and using natural dyes. This led me to read about the exciting technologies which are emerging in textile science, such as biosynthetic fibers and whole garment knitting. I am really glad to have such excellent professors here, that's definitely the best thing about our program. Having access to advanced textile equipment like our jacquard looms, electronic knitting machines and our textile testing lab is also a big plus!"





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Janet Brady

Associate Professor, Textile Product Science Director, Brunner Materials Characterization Laboratory

BS IN TEXTILE TECHNOLOGY FROM PHILADELPHIA COLLEGE OF TEXTILES AND SCIENCE MS IN TEXTILE ENGINEERING FROM PHILADELPHIA COLLEGE OF TEXTILES AND SCIENCE

"As a trained Textile Technologist and Engineer my interests include helping companies develop textile products, measure performance, identify product deficiencies and find solutions for those deficiencies. I have over 35 years of product development experience and have worked with major fiber, yarn, fabric, and product companies in the apparel, home furnishing, industrial, and medical textile arenas. I enjoy interdisciplinary team work where I can bring my "fitness for use" knowledge of textile materials and testing skills to the table. "

COURSES

- Apparel Fabric Performance
- Textile Materials
- Foundation Fiber & Yarn Studies
- Product Evaluation
- Advanced Fabric Performance Evaluation
- Interior Fabric Performance
- Capstone in TMT (TPS)



ALUMNI PROFILE

Jodi Wallis

Director, Technical Product Performance Noble Biomaterials Scranton, PA CLASS OF 2014

"My favorite thing about the Textile Product Science program was the hands-on approach taken by the professors. We learned how to handle textile materials in application, testing, and end use. I started at Noble Biomaterials as an intern while I was a sophomore, in the yarn testing lab. I returned my junior year and progressed to learning how to test and certify various antimicrobial products.

Now as Director of Technical Product Performance for a global textile company, I realize how Jefferson prepared me for the 'real world'. Hands-on learning as opposed to text book learning in this field is critical. My goal is to continue to modernize the textile marketplace and provide cutting-edge technologies and solutions to keep up with constantly changing consumer demands and needs. "

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Thomas Jefferson University