



The University of Texas at Austin

Texas Institute for Discovery

Education in Science

College of Natural Sciences

Textiles and Apparel Program Learning Outcomes:

Graduates from the Textiles and Apparel undergraduate degree program will be able to:

- *Outcome 1:* Apply the core principles of science including innovation, discovery, technology, nature, and design to textiles, apparel, and merchandising.
- *Outcome 2:* Evaluate the properties and performance of fibers, textiles, and textile products.
- *Outcome 3:* Identify and assess the functional, technical, and aesthetic aspects of apparel.
- *Outcome 4:* Process and interpret numerical data to solve discipline-specific problems.
- *Outcome 5:* Appraise and propose social and environmental solutions across the textile and apparel supply chain.
- *Outcome 6:* Implement foundational and innovative technologies to create solutions as applied to the textile and apparel industry.
- *Outcome 7:* Synthesize and apply research methods and theory to generate new fibers, textiles, design processes, and solve discipline-specific problems.
- *Outcome 8:* Apply social science theories and consumer data to anticipate the needs of the consumer and the community, analyze consumer behavior, and develop textile and apparel products.
- *Outcome 9:* Create a design-thinking roadmap integrating technology and science with an empathetic, human-centered, solution-focused approach to propose solutions to challenges within the textiles and apparel discipline.
- *Outcome 10:* Effective communication:
 - Write clear, concise, stylistically appropriate written reports with evidence.
 - Deliver professional, persuasive and evidence-based oral presentations.
 - Create and use figures and graphs appropriately to support an argument.
 - Translate research to a broader general audience.
- *Outcome 11:* Information literacy:

- Identify and evaluate information sources.
- Read and interpret primary literature.
- Synthesize primary literature into a review paper.
- Compare and contrast conflicting findings within the literature.
- *Outcome 12: Self-directed learning:*
 - Attain a discipline-specific goal independently, requiring minimal supervision.
 - Design, execute, and present material gained from a learning experience.
 - Be persistent, and respond productively to mistakes.
 - Analyze and critically evaluate one's own work to identify areas for improvement.
- *Outcome 13: Teamwork:*
 - Analyze a problem and devise a solution through collaboration in a group.
 - Plan and coordinate with a group for maximal cooperation, efficiency and effectiveness.
 - Communicate and work effectively with people different from oneself.
 - Apply effective conflict management strategies.