



What will you say when someone asks what you did this summer? After taking this course, you'll say you developed a smart textiles company! Using the framework around building a business model plan for a smart textile product, this course will develop your multidisciplinary technical and entrepreneurship skill sets.

- Through reverse engineering and market research of smart textile products, you will understand critical features in the electrical system design, choice of the materials, and aesthetic design that relates to meeting the balance between the function of a smart textile product and customer needs.
- You will learn about the product design process and how to communicate ideas across disciplines using a 'tech pack' for your company's smart textile product.
- For your company, you will study consumer value proposition insights, perform a supply chain analysis for costing and availability, and design a custom manufacturing facility.
- Finally, you will learn the steps to starting your own company including understanding patent protection, finances and business collaborations.



Instructors:



Dr. Jesse S. Jur is an Associate Professor of Textile Engineering, Chemistry & Science at NC State University's Wilson College of Textiles and is the leads the Nano-EXtended Textiles (NEXT) research group focusing on wearable technologies materials and design. He is a lifelong entrepreneur, having multiple years of startup experience and is on the advisory board for multiple technology startups. He is also the CEO and founder of the NEXT Systems R&D, a company developing innovation wearables solutions for industrial applications.



Dr. Amanda C. Mills is a fusion designer and project coordinator in the Nano-EXtended Textiles (NEXT) research group within the Wilson College of Textiles at NC State University. Her focus is on developing innovative methods for electronics integration into textiles. She creates full system demonstration platforms to examine the impact of the textile on the device and vice versa. For example, this has included system level electronic designs and knit structure designs for human energy harvesting and physiological sensing.