

TC: Technical Design

TC 311 — Production Pattern Development I

2 credits; 1 lecture and 2 lab hours

This course focuses on the development of production-ready patterns for woven fabrics from technical specification sketches. Students analyze the effects of body measurements, pattern shapes, and production construction techniques on garment fit, quality, and performance. Prerequisite(s): (DP 111 or FD 111) and (FD 121 or PM 121) and FD 131.

TC 312 — Production Pattern Development II

2 credits; 1 lecture and 2 lab hours

Students further develop skills learned in TC 311 through an emphasis on fit concepts and patterns for woven, knit, and lined garments. Students learn to recognize and apply pattern corrections that maintain garment balance, proportion, and design integrity. Prerequisite(s): TC 311.

TC 321 — Computerized Pattern Development

2 credits; 1 lecture and 2 lab hours

Students learn to develop computerized flat patterns using state-of-the-art apparel industry software. Students use and incorporate the various functions in the software menus as they create, modify, store, and plot production patterns. Prerequisite(s): (DP 111 or FD 111) and (FD 121 or PM 121).

TC 322 — Computerized Grading, Marking, and Specs

3 credits; 1 lecture and 4 lab hours

Students learn to use a state-of-the-art apparel industry grading and marking software system to grade patterns, make markers, and manage files. Course stresses the importance held by fabric properties on the development of accurate graded specs for patterns and for marker making. Prerequisite(s): TC 311 and TC 321.

TC 341 — Technical Design: Wovens

2 credits; 1 lecture and 2 lab hours

This course explores in depth the technical design process for woven garments. Students utilize digital imaging, industry-specific terminology, and software to create full tech packages. Through case studies and hands-on techniques, they incorporate problem-solving methods used by technical designers in the industry. Prerequisite(s): TC 311 and (AR 215 or FF 242) and (FD 241 or MG 252 completed spring 2008 or later).

TC 421 — Computerized Pattern and Fit Corrections

2 credits; 1 lecture and 2 lab hours

Students analyze garment fittings and then make corrections to computerized patterns using the more advanced features of the pattern design system. They manage the data file information and communicate complete fit and pattern technical details. Prerequisite(s): TC 312, TC 322, and TC 341.

TC 441 — Technical Design II: Stretch

2 credits; 1 lecture and 2 lab hours

Using industry product data management software systems, students construct full technical design packages for stretch garments. Students explore the effects of stretch on pattern shape and fit. They identify the accuracy of finished garments and communicate the revisions necessary for various sample stages. Prerequisite(s): TC 312, TC 322, and TC 341.

TC 451 — Production and Technical Design

2 credits; 2 lecture hours

This course stresses the relationship between technical design and the apparel production cycles and manufacturing processes. Discussions center on sourcing and logistics, apparel standards, compliance and regulations, current industry issues, and business ethics and conduct.

Prerequisite(s): TC 322, TC 341, and MG 314.

TC 491 — Technical Design Senior Project

2.5 credits; 1 lecture and 3 lab hours

Student teams strategize on how to improve the market share for a specific product or brand. Each team develops innovative technical design solutions for various product life cycle stages. They present their actual products and a written review/case study subject to critical industry evaluation.

Prerequisite(s): TC 421 and TC 441.