

## FS 3470 - CAD PRODUCTION PATTERNMAKING

Credits: 3

This advanced-level course expands the knowledge of CAD design technologies used in manufacturing production to include the development of production patterns, pattern grading, zero waste markers, laser cutting, and inventory control. Students will experience the full capacity of pattern design software systems to understand the process of a product's mass production cycle along with the skills to make decisions of cost efficiency. Upon successful completion of this course, students will have the knowledge to develop and supervise the engineering of mass pattern parts prepared for construction in production manufacturing.

Prerequisites: FS 2410 - Design Technologies and FS 1350 - Construction II: Draping + Drafting

Course Learning Outcomes:	Exceeding	Meeting	Developing	Not meeting	Program Outcomes	New Institutional Outcomes
Discuss CAD design technologies with a focus on creative potential and industry-standard techniques.	Student work displayed an excellent degree of competence in CAD technologies	Student work displayed a satisfactory degree of competence in CAD technologies	Student work displayed a limited degree of competence in CAD technologies	Student work displayed no degree of competence in CAD technologies	FS1	Design Competence, Cultural Competence
Develop production patterns, pattern grading, efficient markers, and inventory control.	Student work displayed an excellent degree of competence in production patterns	Student work displayed a satisfactory degree of competence in production patterns	Student work displayed a limited degree of competence in production patterns	Student work displayed no degree of competence in production patterns	FS2	Critical Thinking, Cultural Competence, Design Competence
Calculate actual and estimated costs of garment construction and identify opportunities for cost efficiency.	Student work displayed an excellent degree of competence in costing	Student work displayed a satisfactory degree of competence in costing	Student work displayed a limited degree of competence in costing	Student work displayed no degree of competence in costing	FS4	Critical Thinking, Communication Competence
Develop skills in mass pattern engineering for construction in production manufacturing.	Student work displayed an excellent degree of competence in mass pattern engineering	Student work displayed a satisfactory degree of competence in mass pattern engineering	Student work displayed a limited degree of competence in mass pattern engineering	Student work displayed no degree of competence in mass pattern engineering	FS3, FS5	Critical Thinking, Communication Competence, Design Competence, Cultural Competence