

STATE BOARD OF COMMUNITY COLLEGES
Curriculum Program Application
(New to the System)

The State Board of Community Colleges is asked to approve the curriculum program at the listed college on the condition that equipment funds are available to the college and operating funds generated by the budget formula will permit the offering of the program without any special allocation of funds.

Gaston College
Textile Technology (A50500)

Contact(s):

Dr. Lisa Eads
AVP Programs

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Gaston College
Textiles Technology (A50500)**

Program Planning: Gaston College is seeking approval for the Textiles Technology (A50500) program to begin Fall 2021. The planning area is defined as the college's service area of Gaston and Lincoln counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Gaston College on October 5, 2020. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Gaston College have certified the following:

- The proposed program will enhance the workforce of North Carolina, will provide educational and training opportunities consistent with the mission of the college, and will not duplicate the opportunities currently offered.
- They have assessed the need for the proposed program and the resources required to maintain a viable program and certify that the college can operate the proposed program efficiently and effectively within the resources available to the college.
- The college will complete a program accountability report including student success measures, enrollment trends, completion rates, and employment data three years after implementation of the program.

Program Rationale: Gaston College (GC) indicates the following:

- The college's Career Portal, which draws employment information from multiple sources, show that there are over 350 annual openings for workers in all aspects of the textile industry including design, knitting, weaving, bleaching and dyeing, and cutting in the local job market.
- The NC Department of Commerce projected long-term employment growth in goods-producing industries for 2017-26 in the Charlotte Region of approximately 14,000 jobs.
- There are significant textile employers in the college's service and surrounding area that include American Dornier, Elevate Textiles (formerly American and Efird), Beverly Knits, Firestone Fibers and Textiles, Marlatex, McMurray Fabrics, Meridian Specialty Yarns, Parkdale Mills, Pharr Yarns, Southern Fiber, NC Spinning Mills, TENOWO, and others. The college works closely with these industries through its Textile Technology Center where it provides testing, research, and professional development opportunities.
- GC has established strong ties with the textile industry as a result of short-term training the college offers through its Economic and Workforce Development Division. Gaston College's Textile Technology Center currently offers training and education at the local, regional, state, and national levels.

- Letters of support for the proposed textile program were received by the college from Gaston Regional Chamber, Gaston County Schools, Lincoln County Schools, Montcross Area Chamber of Commerce, Gaston County Economic Development Commission, Lincoln Economic Development Association, and the Gaston College Textile Technology Center with input from its Advisory Board.
- Lincoln County Schools currently offers a Career and Technical Education program in Apparel and Textile Production and is supportive of the collaboration and career pathway opportunities that will result from the textile degree offering. GC has also collaborated with NC State University's textile college to create a linear pathway that will lead from an AAS degree that can begin in high school under Career and College Promise to a four-year degree in one of three textile concentrations.

Impact of the Proposed Program on Other Programs: The Textiles Technology (A50500) degree is new to the system and dissimilar to other program offerings; therefore, an impact assessment was not required. As a result, no *negative impact responses were received*.

Implementation of Collaborative Plan: Not Applicable

Curriculum Design: The proposed program of study is in compliance with the proposed curriculum standard.

Curriculum Description as Designated on Curriculum Standard:

This curriculum prepares individuals for textile manufacturing. Coursework includes industrial safety, quality control, and textile courses in yarn production, weaving processes, dyeing, finishing, and fiber science. Graduates should qualify as technicians, managers, or designers in the textile industry.

Contact(s):

Dr. Frank Sculetta
Senior Program Administrator

Proposed**CURRICULUM STANDARD**

Curriculum Program Title	Textiles Technology	Program Code	A50500
Concentration	(not applicable)	CIP Code	14.2801

Curriculum Description

This curriculum prepares individuals for textile manufacturing.

Coursework includes industrial safety, quality control, and textile courses in yarn production, weaving processes, dyeing, finishing, and fiber science.

Graduates should qualify as technicians, managers, or designers in the textile industry.

Curriculum Requirements*

[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.10]

- I. **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.
- II. **Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*
- III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	AAS	Diploma	Certificate
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	64-76	36-48	12-18

**Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.*

Major Hours

- A. Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.
- B. Concentration** *(if applicable)*. A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.
- C. Other Major Hours.** Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit

Textiles Technology A50500

	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE	26 SHC		
Required Courses: TEX 110 Fundamentals of Textiles 3 SHC TEX 111 Intro to Fiber Science 3 SHC TEX 113 Yarn Production Systems 3 SHC TEX 210 Fiber Science 5 SHC TEX 213 Fabric Forming and Weaving 3 SHC TEX 214 Knitting Processes 3 SHC TEX 215 Dyeing and Finishing 3 SHC TEX 219 The Textile Industry 3 SHC			
B. CONCENTRATION <i>(Not applicable)</i>			
C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> ACA, ART, ATR, BUS, CHM, DFT, EGR, ELC, ELN, GRD, ISC, LOG, MAT, MEC, MNT, PHY, PTE, PTC, SPA, TEX, and WBL <i>Up to two semester hour credits may be selected from ACA.</i> <i>Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.</i>			
III. Other Required Hours <i>A college may include courses to meet graduation or local employer requirements in a certificate (0-1 SHC), diploma (0-4 SHC), or an associate in applied science (0-7 SHC) program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.</i>			

IV. Employability Competencies

Fundamental competencies that address soft skills vital to employability, personal, and professional success are listed below. Colleges are encouraged to integrate these competencies into the curriculum by embedding appropriate student learning outcomes into one or more courses or through alternative methods.

- A. Interpersonal Skills and Teamwork** – The ability to work effectively with others, especially to analyze situations, establish priorities, and apply resources for solving problems or accomplishing tasks.
- B. Communication** – The ability to effectively exchange ideas and information with others through oral, written, or visual means.
- C. Integrity and Professionalism** – Workplace behaviors that relate to ethical standards, honesty, fairness, respect, responsibility, self-control, criticism and demeanor.
- D. Problem-solving** – The ability to identify problems and potential causes while developing and implementing practical action plans for solutions.
- E. Initiative and Dependability** – Workplace behaviors that relate to seeking out new responsibilities, establishing and meeting goals, completing tasks, following directions, complying with rules, and consistent reliability.
- F. Information processing** – The ability to acquire, evaluate, organize, manage, and interpret information.
- G. Adaptability and Lifelong Learning** – The ability to learn and apply new knowledge and skills and adapt to changing technologies, methods, processes, work environments, organizational structures and management practices.
- H. Entrepreneurship** – The knowledge and skills necessary to create opportunities and develop as an employee or self-employed business owner.

An **Employability Skills Resource Toolkit has been developed by NC-NET for the competencies listed above. Additional information is located at: <http://www.nc-net.info/employability.php>*

***The **North Carolina Career Clusters Guide** was developed by the North Carolina Department of Public Instruction and the North Carolina Community College system to link the academic and Career and Technical Education programs at the secondary and postsecondary levels to increase student achievement. Additional information about Career Clusters is located at: http://www.nc-net.info/NC_career_clusters_guide.php or <http://www.careertech.org>.*

Proposed Textile Course

*Effective Term – Fall 2021 [2021*03]*

TEX 215 Dyeing and Finishing

Class 3 Lab 0 Clinical 0 Work 0 Credit 3

Prerequisites: None

Corequisites: None

This course covers the preparation, dyeing, printing, and finishing of natural and man-made fabrics. Emphasis is placed on the chemical nature of dyes and the fastness and properties of finishes used to impart specific end-use attributes. Upon completion, students should be able to demonstrate a working knowledge of testing, inspecting, and processing parameters of textile dyeing.