

**STATE BOARD OF COMMUNITY COLLEGES
CURRICULUM PROGRAM APPLICATIONS
Fast Track for Action [FTFA*]**

***Fast Track For Action:** Program applications must meet the following criteria in order to be placed on the FTFA program approval request presented to the State Board of Community Colleges as part of the consent agenda:

- The curriculum program title currently exists within the System and does not require the creation of a new program title and new curriculum standard;
- The application is complete, requires no further analysis or documentation, and has the endorsement of Academic Programs;
- There are no negative impact assessments from other colleges; and
- The college does not go outside of its service area for planning purposes.

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

Alamance Community College

Mechatronics Engineering Technology (A40350)

Asheville-Buncombe Technical Community College

Occupational Therapy Assistant (A45500)

Mitchell Community College

Culinary Arts (A55150)

Nash Community College

Veterinary Medical Technology (A45780)

Stanly Community College

Agribusiness Technology (A15100)

Contact Person:

Ms. Jennifer Frazelle
Director

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT**

Alamance Community College
Mechatronics Engineering Technology (A40350)

I. Program Planning

Alamance Community College (ACC) is seeking approval for the Mechatronics Engineering Technology (A40350) program to begin Fall 2016. The planning area is defined as the college's service area of Alamance County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Alamance Community College on November 12, 2015. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Alamance Community 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.

II. Program Rationale

Alamance Community College indicated the following:

- According to data provided by the U.S. Bureau of Labor Statistics for 2012-22, 17% growth is projected for industrial machinery technician jobs nationally.
- Data from the NC Department of Commerce's County Labor Market Conditions 2015 report indicated that Alamance County added 400 jobs in the manufacturing sector since the beginning of the year, representing a 4.7% increase in the types of jobs that are expected to be supported by the mechatronics program.
- A local industry survey involving eight companies conducted in August, 2015, indicated that there will be as many as 130 positions available within the manufacturing sector to qualified individuals. Companies expressed the challenge they have faced filling positions because of a skills-gap caused by the transition of traditional manufacturing to advanced manufacturing which requires specific automation process and control technician skill sets currently lacking in the field.
- The National STEM Consortium estimates average annual salaries for mechatronics technicians to be approximately \$50,000 and the job outlook is expected to be "bright" through at least 2018.
- Letters of support for the program were received from the Alamance-Burlington School System Superintendent and the Carolina Corridor economic development President, Engineered Controls International, LLC, Technical Precision Plastics, Inc., Fairystone Fabrics, Inc., and GKN Driveline North America, Inc.

- The college worked with local workforce development agencies, the county school system, and a consortium of seven companies (Engineered Controls, International; Fairystone Fabrics, LLC; GKN Driveline; Glen Raven, Inc.; Nypro, a Jabil Company; Sandvik AB; and Technical Precision Plastics, Inc.) engaged in advanced manufacturing to form the Career Accelerator Program (CAP) apprenticeship partnership. This innovative model will allow students to be paid apprentices in one of these local industries while completing their studies beginning as high school seniors and following at ACC. This pathway from high school through ACC to industry will result in the awarding of an AAS in Mechatronics Engineering Technology, a Registered Apprenticeship certificate, and access to advanced manufacturing jobs in the community.
- The proposed mechatronics program is designed to replace the college's Industrial Systems Technology program. The mechatronics program will include competencies better aligned to advanced manufacturing industry employee skill requirements.
- The college surveyed 45 current students regarding their interest in enrolling in a mechatronics program. Nearly 70% of the students indicated interest in enrolling. In addition, there are 10-12 apprenticeship positions available to senior high school students who plan on enrolling in the mechatronics program beginning in Fall 2017.

III. Impact of the Proposed Program on Other Programs

Fifteen colleges are currently approved to offer the Mechatronics Engineering Technology (A40350) program. An impact assessment was sent to colleges located in contiguous counties. **No negative impact responses were received.**

IV. Implementation of Collaborative Plan

Not Applicable

V. Curriculum Design

The proposed program of study is in compliance with the State Board approved curriculum standard.

VI. Curriculum Description as Designated on Curriculum Standard

These curriculum are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, industrial and technology managers, or research technicians.

Mechatronics Engineering Technology: *A course of study that prepares the students to use basic engineering principles and technical skills in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures. Graduates should be qualified for employment in industrial maintenance and manufacturing including assembly, testing, startup, troubleshooting, repair, process improvement, and control systems, and should qualify to sit for Packaging Machinery Manufacturers Institute (PMMI) mechatronics or similar industry examinations.*

Contact Person: Mr. Frank Sculetta, Program Coordinator

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Asheville-Buncombe Technical Community College
Occupational Therapy Assistant (A45500)**

I. Program Planning

Asheville-Buncombe Technical Community College is seeking approval for the Occupational Therapy Assistant (A45500) program to begin Fall 2016. The planning area is defined as the college's service area of Buncombe and Madison counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Asheville-Buncombe Technical Community College on April 6, 2015. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Asheville-Buncombe Technical Community 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.

II. Program Rationale

Asheville-Buncombe Technical Community College (A-B Tech) indicates the following:

- In 2010, the NC Department of Commerce reported that 13% of the population in Buncombe County was 65 years of age or older. In 2014, this percentage had increased to 24.5%.
- Western North Carolina is a desirable retirement location. An increasing aging population will have more medical conditions which will require an increase in Occupational Therapy Assistants (OTAs) and other health care professionals.
- Economic Modeling Specialists Inc. (EMSI) reports employment for OTAs is expected to grow by 28% in Buncombe and Madison counties. Health care is one of the top employment sectors in western North Carolina.
- The median hourly wage, for OTAs in Buncombe and Madison counties, is \$31.40 which is among the higher salaries for health care professionals with an associate degree.
- The U.S. Bureau of Labor Statistics projects the need for OTAs to grow by 41% between 2012 and 2022.
- A letter of support for the program was submitted to A-B Tech by the Mission Hospital Healthcare System.

- In 2011, the U.S. Department of Health and Human Services Task Force on Aging reported nationally seventy-seven million baby boomers would turn sixty-five years of age that year. They also projected by 2025 the number of Medicare recipients will reach 69.3 million and represent 20.6% of the U.S. population.
- Demand for allied health professionals varies by employment setting, since facilities deliver different types of care to patients with conditions of varying acuity. Long-term care facilities accounted for the highest percentage of vacancies for OTAs at fifty-four percent. (*Allied Health Job Vacancy Tracking Report, March 2012*)

III. Impact of the Proposed Program on Other Programs

Six community colleges are approved to offer the Occupational Therapy Assistant program. An impact assessment was sent to each college. **No negative impact responses were received.**

IV. Implementation of Collaborative Plan

Not Applicable

V. Curriculum Design

The proposed program of study is in compliance with the State Board approved curriculum standard.

VI. Curriculum Description as Designated on Curriculum Standard

The Occupational Therapy Assistant curriculum prepares individuals to work under the supervision of a registered/licensed occupational therapist in screening, assessing, planning, and implementing treatment and documenting progress for clients receiving occupational therapy services.

Course work includes human growth and development, conditions which interfere with activities of daily living, theory and process of occupational therapy, individual/group treatment activities, therapeutic use of self, activity analysis, and grading/adapting activities and environments.

Graduates may be eligible to take the national certification examination for practice as a certified occupational therapy assistant. Employment opportunities include hospitals, rehabilitation facilities, long-term/extended care facilities, sheltered workshops, schools, home health programs, and community programs.

Contact Person:

Ms. Renee Batts
Associate Director

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Mitchell Community College
Culinary Arts (A55150)**

I. Program Planning

Mitchell Community College (MCC) is seeking approval for the Culinary Arts (A55150) program to begin Fall, 2016. The planning area is defined as the college's service area of Iredell County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Mitchell Community College on May 27, 2015. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Mitchell Community 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.

II. Program Rationale

Mitchell Community College indicates the following:

- The Culinary Arts program at Mitchell Community College will be designed to provide employment opportunities for graduates in full service restaurants, hotels, catering operations, contract food services, and institutional in-house operations.
- The college expects to incur minimal expenses with the delivery of the Culinary Arts Program. Because of the partnership between MCC and the Iredell-Statesville Schools which includes the career and technical focus within the school system, current resources, including classroom resources are in place. With an anticipated high demand for the program, additional facilities will be available.
- Data from the NC Department of Commerce indicated culinary related jobs are expected to increase at a rate of 25.5% Iredell County between 2012-2022 which is higher than the national average of 19%. The average wage for culinary positions in the area is \$15.74 per hour.
- In June of 2015, there were 289 job postings for bakers, chefs and head cooks, first line service managers, and food service managers in Iredell County. Of the 289 openings, 79 were unique job postings (NC Department of Commerce).
- In addition to traditional employment prospects with already established organizations, students with a knowledge of Culinary Arts are also suitable for self-employment, contractor, and entrepreneur employment opportunities. Those interested in entrepreneur employment opportunities will have access to support through the college's small business center.

Attachment PROG 9C

The Statesville Chamber of Commerce provided a letter of support and stated that this program would *provide much more extensive study for this growing field and would build upon the Culinary Arts curriculum that is offered at the Career Academy and Technical School.*

- The Director of Career and Technical Education for Iredell-Statesville Schools indicated that this program would *afford high school students opportunities that are above and beyond what is currently available to them.*
- The Director of Food Services for Iredell Memorial Hospital also provided a letter of support and stated *the program would be a big benefit to Iredell County and surrounding communities and would benefit current employees who would like to enhance their work skills and grow their education.*
- The Dean of Culinary Education at Johnson and Wales University provided a letter of support and indicated *Mitchell Community College is poised to have significant impact on the shortage in their immediate geographical area by supplying hands'on technical education.* If approved, this program will articulate to Johnson and Wales University's Culinary Program.

III. Impact of the Proposed Program on Other Programs

Twenty-five colleges are approved to offer the Culinary Arts (A55150) program. An impact assessment was sent to colleges located in contiguous counties. **No negative impact responses were received.**

IV. Implementation of Collaborative Plan

Not Applicable

V. Curriculum Design

The proposed program of study is in compliance with the State Board approved curriculum standard.

VI. Curriculum Description as Designated on Curriculum Standard

This curriculum provides specific training required to prepare students to assume positions as trained culinary professionals in a variety of foodservice settings including full service restaurants, hotels, resorts, clubs, catering operations, contract foodservice and health care facilities.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism. Courses include sanitation/safety, baking, garde manger, culinary fundamentals/production skills, nutrition, customer service, purchasing/cost control, and human resource management.

Graduates should qualify for entry-level opportunities including prep cook, line cook, and station chef. American Culinary Federation certification may be available to graduates. With experience, graduates may advance to positions including sous chef, pastry chef, executive chef, or foodservice manager.

Contact Person:

Dr. Lisa Eads
Program Coordinator

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Nash Community College
Veterinary Medical Technology (A45780)**

I. Program Planning

Nash Community College is seeking approval for the Veterinary Medical Technology (A45780) program to begin Fall 2016. The planning area is defined as the college's service area of Nash County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Nash Community College on November 18, 2013. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Nash Community 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.

II. Program Rationale

Nash Community College (NCC) indicates the following:

- Veterinary medicine has become more advanced and specialized, resulting in veterinarians seeking more qualified employees capable of performing and assisting with a wide-array of specialized procedures in the care of domestic, wild, and livestock animal populations.
- The U.S. Bureau of Labor Statistics projects the need for Veterinary Technologists and Technicians to grow by 30% between 2012 and 2022.
- Letters of support for the program were submitted to NCC by the Riverside Veterinary Hospital, Brandywine Veterinary Hospital, P.A. and Benvenue Animal Hospital, P.A.
- The owner of Riverside Veterinary Hospital stated the following: *Each time a position opens, I look for Registered Veterinary Technicians (RVTs), but normally find very few applying. In speaking to other veterinarians in the area there is a tremendous need for well qualified RVTs.*

- In March 2015, nine employers responded to an employer survey completed by NCC. Six of the employers reported they had veterinary technician vacancies that were difficult to fill with qualified personnel. Eight of the employers indicated they anticipate an increase in Veterinary Technician positions within the next ten years.
- In Fall 2014 and Spring 2015, NCC offered a Veterinary Assistant course through continuing education. Twenty-eight students enrolled in the course responded to a student survey with 64% indicating a need for NCC to offer a Veterinary Medical Technology program.
- The Director of Veterinary Medicine at Brandywine Veterinary Hospital, P.A. noted the following: *Our practice has benefitted from the Veterinary Assisting class that is currently offered at the college and we look forward to working with Nash Community College in the expansion of this idea to a full-fledged, quality veterinary technician program that will benefit so many different individuals in this area.*

III. Impact of the Proposed Program on Other Programs

Three community colleges are approved to offer the Veterinary Medical Technology program. An impact assessment was sent to each college. Initially, Central Carolina Community College (CCCC) expressed objections. **This issue has been resolved and the objection has been removed.**

IV. Implementation of Collaborative Plan

Not Applicable

V. Curriculum Design

The proposed program of study is in compliance with the State Board approved curriculum standard.

VI. Curriculum Description as Designated on Curriculum Standard

This curriculum is designed to prepare individuals to assist veterinarians in preparing animals, equipment, and medications for examination and surgery; collecting specimens; performing laboratory, radiographic, anesthetic, dental procedures; assisting in surgery; and providing proper husbandry of animals and their environment.

Course work includes instruction in veterinary anatomy, nutrition, parasitology, pathology, physiology, radiology, terminology, zoology, office practices, laboratory techniques, dentistry, and small and large animal clinical practices.

Graduates of accredited programs may be eligible to take state and national examinations administered by the North Carolina Veterinary Medical Board. Graduates may be employed in veterinary clinics; diagnostic, research, or pharmaceutical laboratories; zoos; academic institutions; or other areas associated with animal care.

Contact Person:

Ms. Renee Batts
Associate Director

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Stanly Community College
Agribusiness Technology (A15100)**

I. Program Planning

Stanly Community College is seeking approval for the Agribusiness Technology (A15100) program to begin Spring, 2016. The planning area is defined as the college's service area of Stanly County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Stanly Community College on October 8, 2015. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Stanly Community 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.

II. Program Rationale

Stanly Community College indicates the following:

- The job outlook for agribusiness related fields is steady or higher than average for the region, with an estimated 10% growth from 2010 to 2020. (Economic Modeling Specialists)
- The 2013 average hourly earnings were estimated at \$14.67. (US Department of Labor, Occupational Outlook Handbook)
- The college plans to offer a Career and College Promise high school Agribusiness program if approved for the program.
- One hundred and sixty-seven high school students responded to a student survey with 71.86% indicating a need for Stanly CC to offer an Agribusiness degree. Ninety-nine students indicated they would be interested in enrollment in a Career and College Promise Agribusiness pathway.
- Seventeen employers within the service area responded to an employer survey. The employers estimated that they would need to employ sixty-nine people in related areas within the next two years. Eighty-eight percent of the employers felt there was a need for the college to offer the Agribusiness Technology programs. One employer stated the following: *I feel this program would be very beneficial to our community, especially with agriculture being the number one business in Stanly County.* Another employer stated: *With aging farmers, many are looking to hire help, but finding someone with the education or experience is difficult.*
- Graduates of the program will also be able to pursue entrepreneurial opportunities. The college will provide assistance to entrepreneurs through their Small Business Center.

Attachment PROG 9E

- If approved for the program, the college plans to pursue bilateral agreements with North Carolina State University and A&T to assist students planning to transfer to pursue a four-year degree.
- The President and Chief Executive Officer of the Stanly County Chamber of Commerce is supportive of the proposed program and stated the following: *Stanly County has a long standing history of agriculture as a major economic driver. Not only our strong agricultural economy, but also our proximity to one of the state's major metropolitan markets of the greater Charlotte region, makes the Agribusiness Technology program an important initiative for providing education for future generations. Stanly County's largest economy stems from agriculture, with aging populations of farmers and agriculture producers, it is critical to educate the next generation of producers.*
- The Superintendent of Stanly County Schools is supportive of the proposed program and stated the following: *This would be a great opportunity for students enrolled in Career and Technical Education agricultural related pathways at the high school level to further their education in the field of agriculture. The program will benefit current and expanding businesses, as well as draw new companies to the area.*
- The North Carolina Cooperative Extension County Extension Director is supportive of the proposed program and stated the following: *With agriculture being a major industry in our local economy, as well as North Carolina, training young and older adults to be competitive in this work force is vital.*

III. Impact of the Proposed Program on Other Programs

Seven community colleges are approved to offer the Agribusiness Technology program. An impact assessment was sent to South Piedmont Community College which is located in a contiguous county. South Piedmont Community College is in agreement with the impact assessment prepared by Stanly Community College. **No negative impact assessments were received.**

IV. Implementation of Collaborative Plan

Not Applicable

V. Curriculum Design

The proposed program of study is in compliance with the State Board approved curriculum standard.

VI. Curriculum Description as Designated on Curriculum Standard

These curriculum are designed to provide the entrepreneurial and technical skills necessary to manage a profitable, environmentally sound, community based small farm or agricultural business. The objective is the development of a workforce knowledgeable in sustainable agriculture practices.

Students will learn the fundamentals of agriculture, focusing on crop production and business. Emphasis is placed on entrepreneurial and field training. Students will also learn the basic principles of our economic system and government policies and programs relating to agriculture.

Graduates should qualify for a variety of jobs in agricultural businesses such as equipment, feed, and agricultural supply sales; store management; farm operations; wholesale and retail produce management; nursery operations; and environmental and agricultural education.

Agribusiness Technology: A program that prepares individuals to manage agricultural businesses and agriculturally related operations within diversified corporations. Potential course work includes instruction in agriculture, agricultural specialization, business management, accounting, finance, marketing, planning, human resources management, and other managerial responsibilities.

Contact Person: Ms. Jennifer Frazelle
Director