

STATE BOARD OF COMMUNITY COLLEGES
Curriculum Program Applications
Fast Track for Action [FTFA*]

Request: 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 colleges and operating funds generated by the budget formula will permit the offering of these programs without any special allocation of funds.

Lenoir Community College
Emergency Management (A55460)

Nash Community College
Broadcasting and Production Technology (A30120)

Pamlico Community College
Dental Laboratory Technology (A45280)

Southeastern Community College
Mechatronics Engineering Technology (A40350))

Background: Program applications must meet the following criteria in order to be placed on the Fast Track for Action (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.

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Lenoir Community College
Emergency Management (A55460)**

Program Planning: Lenoir Community College is seeking approval for the Emergency Management program to begin Fall 2017. The planning area is defined as the college's service area of Lenoir, Jones and Greene counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Lenoir Community College on March 27, 2017. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Lenoir 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.

Program Rationale: Lenoir Community College (LCC) indicates the following:

- Currently, LCC offers Emergency Medical Science (EMS) and Criminal Justice Technology (CJC) through curriculum programs. In addition, they offer EMS, Fire and Law Enforcement through continuing education. Emergency Management will build upon the traditions of excellence established by these first-responder programs.
- LCC surveyed one hundred previous continuing education students in the public health/safety field. Eighty-five percent indicated they were interested in obtaining an Associate Degree in Emergency Management. Ninety percent of the respondents are interested in the classes being offered online.
- LCC and Western Carolina University (WCU) plan on developing an articulation agreement which would allow graduates of LCC's program to transition seamlessly into the last two years of the Emergency and Disaster Management online baccalaureate program.

- Utilizing the Career Coach job market analysis tool, LCC determined there were one hundred and twenty-two Emergency Management Directors employed within a hundred-mile radius of their campus. Over the next four years, this number is expected to increase over seven percent. Additionally, they noted that twenty-eight percent of the directors were over the age of fifty-five and would likely retire soon.
- *Nationally, the employment of Emergency Management Directors is projected to grow eight percent from 2012 to 2022, about as fast as the average for all occupations. Employment of Emergency Management Directors is expected to grow the fastest in hospitals, schools, and private companies. For example, Emergency Management Directors are projected to grow by eighteen percent in health care and social assistance and twenty-two percent in the professional, scientific, and technical services industries from 2012 to 2022. (Bureau of Labor Statistics, U.S. Department of Labor)*
- The Director of Emergency Services in Lenoir County indicated: *This program is an ever-evolving field and it is our goal to have trained and qualified persons to respond to disasters and help in the preparedness, mitigation and recovery processes.*
- A Commissioner for Lenoir County wrote: *Like many eastern North Carolina communities, Lenoir County has experienced both manmade and natural emergencies. It has been a great asset to have LCC's Public Safety Programs as a partner in preparing our emergency personnel. This additional degree will allow those in the field of public safety to elevate their skills and go on to higher positions of responsibility.*
- A letter from the Executive Director of the Lenoir County Economic Development Board stated: *One of the goals of the Economic Development Board is to promote Lenoir County's strategic assets to economic development prospects. Having a highly qualified pool of emergency management personnel and the College as a partner in disaster relief and mitigation will highlight that Lenoir County is prepared for and dedicated to the safety and well-being of our industrial investments.*
- The President of the North Carolina Emergency Management Association wrote: *A goal of the NC Emergency Management Association is to encourage and support the dissemination of hazard, disaster, and emergency management-related information in colleges and universities across our State. We believe that in the future; more and more emergency managers in government, as well as in business and industry, will come to the job with a college education that includes a degree in emergency management.*
- The Manager for the Federal Emergency Management Agency's Emergency Management Higher Education Program wrote: *We are becoming a much more vulnerable society faced with growing threats, new and evolving hazards, and for a variety of reasons, more people at risk. We need, now more than ever, to build and sustain a generation of more professional, skilled, diverse, and better educated 'emergency managers,' emergency personnel, public health workers and others, in both the public and private sectors, to better face the challenges facing the nation.*

Impact of the Proposed Program on Other Programs: Fifteen community colleges are approved to offer the Emergency Management program. An impact assessment was sent to colleges located in contiguous counties. **No negative impact responses were received.**

Implementation of Collaborative Plan: Not Applicable

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

Curriculum Description as Designated on Curriculum Standard:

The Emergency Management curriculum is designed to provide students with a foundation of technical and professional knowledge needed for emergency services delivery in local and state government agencies. Study involves both management and technical aspects of law enforcement, fire protection, emergency medical services, and emergency planning. Course work includes classroom and laboratory exercises to introduce the student to various aspects of emergency preparedness, protection, and enforcement. Students will learn technical and administrative skills such as investigative principles, hazardous materials, codes, standards, emergency agency operations, and finance. Employment opportunities include ambulance services, fire/rescue agencies, law enforcement agencies, fire marshal offices, industrial firms, educational institutions, emergency management offices, and other government agencies. Employed persons should have opportunities for skilled and supervisory-level positions.

Contact:

Ms. Renee Batts
Associate Director

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Nash Community College
Broadcasting and Production Technology (A30120)**

Program Planning: Nash Community College is seeking approval for the Broadcasting and Production Technology (A30120) program to begin Fall, 2017. 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 September 19, 2016. 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.

Program Rationale: Nash Community College (NCC) indicates the following:

- Over the last ten years, students have participated in broadcasting, journalism, radio and television production, web-based media via club activities and continuing education. *Nash Community College has not verified continuing education participation in related content.*
- Occupations related to radio announcers, television announcers and broadcast technicians show a declining rate of employment. Occupations related to sound engineering technicians, film and video editors, camera operators and media/communications workers have an annualized positive growth rate.
(North Carolina 2014-2024 Occupational Employment Projections)
- Nash Community College confirms that there are not major employers waiting to "snap up" graduates, but expects that *students completing this program will find employment by producing content in non-traditional, multimedia formats that are a part of the ever-evolving digital landscape.* The college will provide small business development resources to students through their Small Business Center.

- In 2016, the college opened a multi-media studio which is home to Big Bang Radio WNIA 89.1 FM and which operates as a student club organization. The college has recently invested more than \$100,000 in a state-of-the-art production facility and has partnered with Nash County and the town of Nashville to produce and air the local educational television channel. Students were not specifically surveyed to determine interest in enrollment in the proposed curriculum program, however, the college has based student interest in enrollment upon the large number of students that are interactively engaged with the campus media program (Studio 67).
- If the program is approved, Nash Community College will develop a Career and College Promise program for high school students.
- The Executive Director of High Schools (Nash-Rocky Mount Schools) provided a letter of support and stated that he *believes our high school students will benefit tremendously if they are afforded the opportunity to participate in a broadcasting curriculum.*
- The Provost and Vice President for Academic Affairs at Barton College provided a letter of support for the proposed program and indicated Barton's willingness to develop a 2 + 2 articulation between Nash Community College's Broadcasting and Production program and Barton's Mass Communications or Integrated Media and Arts program.
- The President of Capitol Broadcasting Company provided a letter of support and noted: *East Carolina University has established undergraduate and graduate communications programs in Greenville, but currently no two-year broadcast production program is available in this part of the state. We believe NCC is perfectly-positioned to fill this void and provide marketable skills and education to students in the Rocky Mount area and beyond.*
- The Downtown Development Manager for the city of Rocky Mount provided a letter of support. In speaking to the pathway for high school students, the manager noted: *This program will provide younger students with the opportunity to explore and enroll in broadcasting and related courses. In addition, students earning credentials from the program will have entrepreneurial opportunities, including but not limited to weddings, special events, and social media.* The college has not verified that graduates will have the skills needed to pursue the specific opportunities listed in the letter of support.
- The President of WHIG-TV provided a letter of support and noted: *This program possesses the potential to provide local residents of various backgrounds, from recent high school graduates to experienced professionals, an opportunity to develop essential skills in a field of study and skill where our community and region needs significant improvement.*

Attachment PROG 10B

- The Mayor of the town of Nashville provided a letter of support for the proposed program and stated; *This degree will provide our town, existing businesses, and future businesses an opportunity to partner with Nash Community College utilizing 21st century media capabilities.*

Impact of the Proposed Program on Other Programs: Seven community colleges are approved to offer the Broadcasting and Production Technology program. None of these colleges are in counties contiguous to Nash Community College's service area. **Therefore, an impact assessment was not required.**

Implementation of Collaborative Plan: Not Applicable

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

Curriculum Description as Designated on Curriculum Standard:

Students enrolled in the Broadcasting Production Technology curriculum will develop professional skills in radio, television, audio, video, and related applications.

Training will emphasize speech, script writing, production planning, editing, and post production. Students will also study the development of the broadcasting industry, sales, ethics, law, marketing, and management. Hands-on training and teamwork approaches are essential to the instructional process.

Upon successful completion, students are prepared to enter broadcasting, production, and related industries in a variety of occupations.

Contact:

Ms. Jennifer Frazelle
Director

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Pamlico Community College
Dental Laboratory Technology (A45280)**

Program Planning: Pamlico Community College is seeking approval for the Dental Laboratory Technology program to begin Fall 2017. The planning area is defined as the college's service area of Pamlico County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Pamlico Community College on March 28, 2017. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Pamlico 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.

Program Rationale: Pamlico Community College (PCC) indicates the following:

- Currently, PCC offers a successful Dental Laboratory Technology (DLT) program for inmates at Pamlico Correctional Institute. Students are taught how to make all types of removable prostheses, the appropriate utilization of dental equipment, and entrepreneurship. The students learn how to draw a lab to scale, equip and operate it from the business perspective. At the end of the class, the student presents a business plan on starting their own dental lab and a five-year business plan that includes hiring employees. By building on the current captive program, PCC is confident they can have a successful program.
- PCC serves one of the smaller rural counties in the state. In 2015, the estimated population for Pamlico County was 13,174 which ranks them 91 out of the one hundred counties in population. In 2014, approximately thirty-three percent of their population was sixty years of age or older. (NC Department of Commerce)

- According to the Occupational Outlook Handbook, employment of dental laboratory technicians is projected to grow ten percent from 2014 to 2024, faster than the average for all occupations. The aging baby-boomer population will spur the demand for orthotic/dental devices.
- PCC notes that Dental Technicians trained by the college would be prepared to serve a growing number of older residents who are likely to need dental prosthesis as they age.
- PCC indicates that the program will train students for jobs in commercial and private labs, dental clinics, doctor's office laboratories, sales, and entrepreneurship. A trained dental technician earns an average of \$21.14 per hour or an annual salary of \$43,971.
- PCC surveyed four dental practices within their service area. Each dental practice indicated they sent their lab work to New Bern or Greenville. The turn-around time to receive the dental prosthetics is usually one to two weeks. They indicated it would be beneficial to have local DLTs because they could do same day repairs/relines and quicker prosthetic development.
- According to the NC Department of Commerce, over forty-six percent of the working population in Pamlico County work outside their county of residence. PCC surveyed potential employers in their region. PCC reports there are currently twenty-four job openings and an estimation of sixty-three job opening through 2019.
- A Dental Practice in Pamlico County indicated: *As one of the few dentists in Pamlico County, I would welcome dental technicians in this area. Well trained technicians are always an asset to our profession. If adequately trained with a good business model, we could employ their services. It would also be convenient to have a dental laboratory in Pamlico County.*
- A Commissioner for Pamlico County wrote: *The college sees an opportunity to provide new career options in Dental Technology and recognizes a need for workers who have skills to create dental appliance for residents of a county where the average age is 50.2 years. There are jobs available in this field. The demand for dental appliances likely will continue to grow as the area continues to see the average age of its residents increase and experiences as in-migration of older, retired people.*
- A letter from the Executive Director of the Pamlico Chamber of Commerce stated: *This program would equip members of the local workforce with in-demand skills which would improve their job prospects and increase earning potential. According to the 2015 census, Pamlico County has a median income of approximately \$43,000 and a 14.6% poverty rate. By adding the Dental Technology program, there could be a potential income increase for families.*

- The Dental Recruiter for Affordable Dentures Dental Labs a national company wrote:
Currently, we have over 700 technicians employed in our 232 practices/labs located throughout the United States. There is certainly a big need for a school that is set for training removable denture technicians as we have seen a shortage of qualified technicians to fill the need in labs seeking technicians. Affordable Dentures will continue to grow each year. We have been "assigned" to add 20 to 25 new locations and to reach a goal of 100 new sites by 2020.
- PCC surveyed high school seniors and PCC students to determine interest in the DLT program. Thirty-four out of forty-six respondents indicated they would be interested in the program.

Impact of the Proposed Program on Other Programs: One community college is approved to offer the Dental Laboratory Technology program. The college is not located contiguous to Pamlico Community College's service area. **Therefore, an impact assessment was not required.**

Implementation of Collaborative Plan: Not Applicable

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

Curriculum Description as Designated on Curriculum Standard:

The Dental Laboratory Technology curriculum prepares individuals in the art and science of fabricating dental restorations. The dental technician fabricates dentures, partials, metal or porcelain crowns, and bridges. Technicians use specialized hand instruments and equipment and also work with various dental materials. Course work includes in-depth studies of fabrication techniques for both fixed and removable dental prostheses. The dental laboratory technology student will be exposed to classroom, laboratory, and clinical rotation training. Graduates may qualify to take the Recognized Graduate Examination administered by the National Board for Certification and may be employed by commercial laboratories, dental office laboratories, dental manufacturers, or as the owner of a dental laboratory.

Contact Person:

Ms. Renee Batts
Associate Director

**PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Southeastern Community College
Mechatronics Engineering Technology (A40350)**

Program Planning: Southeastern Community College (SCC) is seeking approval for the Mechatronics Engineering Technology (A40350) program to begin Fall 2017. The planning area is defined as the college's service area of Columbus County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at SCC on April 11, 2017. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of SCC 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: Southeastern Community College indicated the following:

- The U.S. Bureau of Labor Statistics suggests that employment opportunities for maintenance and machinery technicians would grow 16% between 2014-24.
- According to the Occupational Outlook Handbook, electro-mechanical and industrial maintenance technicians earn between \$48-53,000 annually. National employment is expected to grow by 73,400 jobs with 1,550 of those jobs projected for North Carolina.
- The president of Southeastern Community College hosted a comprehensive Manufacturing Skills Summit that included a listening tour to obtain feedback from local employers regarding their training needs. Industries including Max Pro Window Films, National Spinning, Council Tool, Filtec Precise, Ply-Gem, W.E. Bailey, West Fraser, along with a group of smaller companies.
- Companies stated the need for individuals possessing automated manufacturing skills in their organizations similar to the ones that would be taught in a mechatronics program. In 2016, the college provided over \$175,000 worth of customized training for local manufacturers.

- SCC's Trustees have placed the expansion of a mechatronics program and multiple laboratories as a priority for the college and plan on supporting it with Connect NC bond funds.
- The college surveyed potential students within their occupational extension programs and early college high school and found that 23-30 students may be interested in enrolling in the program annually.
- The college was awarded a \$250,000 Duke Energy grant that was used to purchase a Festo Manufacturing Production System and Fanuc Robot for instructional training purposes.

Impact of the Proposed Program on Other Programs: Seventeen colleges are approved to offer the Mechatronics Engineering Technology program. An impact assessment was sent to colleges located in contiguous counties. **No negative impact responses were received.**

Implementation of Collaborative Plan: Not Applicable

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

Curriculum Description as Designated on Curriculum Standard: *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:

Dr. Frank Scuiletti
Program Coordinator