

**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.

Central Piedmont Community College  
Polysomnography (A45670)

Durham Technical Community College  
Culinary Arts (A55150)

Lenoir Community College  
Electroneurodiagnostic Technology (A45320)

McDowell Technical Community College  
Applied Engineering Technology (A40130)  
Cyber Crime Technology (A55210)  
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.

**Contact(s):**

Dr. Lisa Eads  
Director

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
Central Piedmont Community College  
Polysomnography (A45670)**

**Program Planning:** Central Piedmont Community College is seeking approval for the Polysomnography (A45670) program to begin Fall 2019. The planning area is defined as the college's service area of Mecklenburg County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Central Piedmont Community College on July 12, 2017. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Central Piedmont 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:** Central Piedmont (CPCC) indicates the following:

- An estimated 50-70 million adults in the US have chronic sleep and wakefulness disorders. Locally there are no fewer than eight individual sleep centers with only four polysomnography programs in NC. The closest program is more than 60 miles away from Charlotte.
- An electronic interest survey of CPCC students living in Mecklenburg County enrolled in Health Programs was done on 6/1/2016. A total of 34 students responded to the survey. Of the students surveyed 24 students indicated interest in the program.
- The U.S. Department of Labor anticipates a 28% increase in demand for Polysomnography technicians in the next ten years in North Carolina with a 23% increase in demand expected nationally.

- The median wage for Polysomnography technicians is \$52,000 a year. Projected jobs available in this specialty area is 480 jobs a year with 140 job openings in the Charlotte, NC, area.
- Career advancement is possible in the sleep sciences field with a degree in Neurodiagnostics and sleep science which is offered locally by UNC- Charlotte. Admission requirements to that program include the Associate Degree in Polysomnography.

**Impact of the Proposed Program on Other Programs:** Four community colleges are approved to offer the Polysomnography program. This program contains a clinical component; therefore, each college was provided with a program impact assessment from Central Piedmont Community College. **Three colleges approved to offer the program are in agreement with the impact assessment. One college was not in agreement but does support the college applying for the program. The concern was limited clinical availability in the Charlotte area.**

**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 Polysomnography curriculum prepares individuals, working in conjunction with a physician, to perform and interpret sleep studies and to provide comprehensive clinical evaluations that are required for the diagnosis of sleep related disorders.*

*Students should acquire the knowledge and skills necessary to perform sleep studies, including recording and interpreting events observed during sleep. Treatment of sleep related disorders and patient education focused on healthy sleep habits will also be discussed.*

*Graduates of accredited programs may be eligible to apply to take the examination offered by the Board of Registered Polysomnographic Technologists. Employment opportunities may be found in hospitals and freestanding sleep centers.*

**Contact(s):**

Dr. Lori Byrd  
Associate Director

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

**Program Planning:** Durham Technical Community College (DTCC) is seeking approval for the Culinary Arts (A55150) program to begin Fall, 2019. The planning area is defined as the college's service area of Durham and Orange counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Durham Technical Community College on October 2, 2018. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Durham 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.

**Program Rationale:** Durham Technical Community College indicates the following:

- There are over 1,000 food and beverage operations between Durham and Orange counties. In 2016, restaurant establishments employed more than 13,000 visitor-related jobs welcoming and serving over 16 million guests. There are 716 restaurants in Durham County and 249 restaurants in Orange County.
- DTCC currently offers a Culinary Arts Career Training program through continuing education (CE). This hands-on program provides industry-related skills, as well as certification opportunities in the ServSafe Manager and ServSafe Alcohol, provided by the National Restaurant Association. Since spring 2010, 188 students have successfully completed the CE program of Culinary Arts.
- The CE program has an existing curriculum pathway with the recently created Hospitality Management program. The Director of the Hospitality program has shared the new curriculum Culinary Arts opportunity with his class, and two-thirds of the students expressed an interest. The potential pathway for a curriculum credit (CU) Culinary Arts program will not only allow a similar relationship, but creates an environment for an entirely new paradigm for how credit and non-credit programs can

partner for the benefit of the school, the industry and, most importantly, the students.

- The American Culinary Federation members reported an average salary of \$74,602 in 2017. There is 3% chef unemployment vs. 4.7% nationwide. Seven (7) of (ten) 10 food service employees say they will continue working in the industry until they retire. (*American Culinary Federation Executive Summary, 2017*)
- Statewide, as of 2017, there are 19,043 food and beverage operations in North Carolina employing 378,979 people. These food service establishments were responsible for providing a total of \$6,248,024,799.00 in total annual wages state-wide to service and culinary workers. (*North Carolina Department of Commerce*)
- Durham County food services establishments were responsible for \$249, 997,532.00 in annual wages, resulting in average weekly salaries of \$349.38 with an average estimated wage between \$8.35 - \$11.71 in 2017. (*North Carolina Department of Commerce*)
- In 2017, Orange County was responsible for \$103,625, 775.00 annual wages and \$346.60 in weekly salaries for food and beverage establishments, with an estimated average wage between \$8.40 - \$11.50. (*North Carolina Department of Commerce*)
- Locally, Durham and Orange counties are known for having trendy restaurants offering farm-to-table cuisine, focusing on the sustainability of livestock and produce. Durham has 27 restaurants offering vegan or vegetarian-friendly menus. Durham also hosts the annual *Vegfest* with over 3,000 attendees gathering to learn about plant-based diets, fresh and new food ideas, helping animals and the environment, and a more health-conscious lifestyle. (*VegTriangle.com*)
- In the future, Durham Tech does plan to incorporate a CCP pathway, in support of our guided pathways/metamajors redesign. Northern High School and Cedar Ridge High School have CTE culinary programs and will be a source of recruitment. Perhaps even more indicative of the increased demand for culinary education is the presence of “Kids in the Kitchen” and “Cooking with Kids” programs available in places around Durham and Orange counties as part of summer camp programs. Two such programs are Durham Spirits Company, which hosts a successful camp each summer and Cest si Bon in Chapel Hill, which has a Kid Chef program.
- Letters of support for the program were received from the Chair of the Hospitality and Tourism Department at North Carolina Central University, and faculty in the Culinary Arts and Hospitality Department at Northern High School and at Cedar Ridge High School.
- Letters of support were also received from industry partners including the Turas Group which recruits culinary professionals and Aramark which is a company that manages the dining programs at 15 universities within North Carolina.

**Impact of the Proposed Program on Other Programs**

Twenty-three 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.***

**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**

*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(s):**

Dr. Lisa Eads  
Director

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
Lenoir Community College  
Electroneurodiagnostic Technology (A45320)**

**Program Planning:** Lenoir Community College is seeking approval for the Electroneurodiagnostic Technology (A45320) program to begin Fall 2019. 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 November 26, 2018. 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:

- According to the U.S. Bureau of Labor Statistics recent projections, Electroneurodiagnostic Technologists (EDT) are projected to increase 19.7% or 152.9 thousand jobs by 2026.
- Employment opportunities are available in LCC's direct services areas of Lenoir, Jones, and Greene counties. The program at LCC would increase the number of trained and credentialed technologists allowing needed expansion of neurology services in the service area. Current positions available in the service area are 15.
- Estimated annual salaries for EDT graduates seeking employment in North Carolina range from \$35,000 - \$47,800.

- Letters of support received from UNC Lenoir Healthcare, UNC Wayne Healthcare, Sleep Works-MedBridge Healthcare, and Durham VA Healthcare System-Sleep & Neurology Department. “Having a local Neurodiagnostics program would greatly help us fill not only our current positions but our future ones as well. “Cindy Dail, Director Cardiopulmonary and Heart Services, UNC- Lenoir Health Care.
- April 9-23, 2018, the college conducted a survey of 1051 students including LCC students as well as current high school students in Lenoir, Jones and Greene counties. A total of 33 students participated in the survey. Seventy-eight percent of the students expressed interest in the Electroneurodiagnostic Program at LCC.
- LCC has an established polysomnography (PSG) program since 2009. This program will provide support with existing equipment, shared resources, clinical contracts and trained, qualified faculty to assist the new program.
- Johnny Williams of UNC Wayne Hospital stated “Historically, finding candidates can be extremely difficult due to the lack of EEG programs in our area. Having high quality program thirty minutes down the road would be a welcome addition to our service area.”

**Impact of the Proposed Program on Other Programs:** Two community colleges are approved to offer the Electroneurodiagnostic Technology program. This program contains a clinical component; therefore, each college was provided with a program impact assessment from Lenoir Community College. **All colleges approved to offer the program are in agreement with the impact assessment.**

**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 Electroneurodiagnostic Technology curriculum is designed to provide students with the knowledge and skills to obtain recordings of patients’ nervous system function through the use of electroencephalographic equipment and other electrophysiological devices. Course work includes communication skills with patients and healthcare personnel, taking appropriate patient histories, electrode application, documentation of patients’ clinical status, electrical waveform recognition, management of medical emergencies, and preparation of descriptive reports for the physician.*

*Graduates should qualify for the ABRET (American Board of Registration of EEG and EP Technologists) Exam and, working under the supervision of a qualified physician, may be employed by hospitals or private offices of neurologists and neurosurgeons.*

**Contact(s):**

Dr. Lori Byrd  
Associate Director

**LENOIR COMMUNITY COLLEGE  
RESPONSE TO  
ELECTRONEURODIAGNOSTIC TECHNOLOGY (END) APPLICATION**

We are providing additional information that you have requested with each bullet statement.

- **Please clarify the general education hours – is it 18 or 21 hours?**  
On page 17 of the application, it lists 18 gen ed hours, which is also reflected in the Program Of Study (POS).
- **Need additional information on the purpose of the program. For example, is there community interest in the program, potential employers for your graduates, projected salaries for graduates, number of available jobs in your service area for this degree and what service will this provide in your community.**

In the application on page 9. Part B states, "END is one of the newer and most rapidly growing specialties in the medical field.... Graduates can work in hospitals, physicians' offices, clinics, research facilities and specialized epilepsy monitoring units and sleep centers. Employment opportunities are available in LCC's direct services areas of Lenoir, Jones, and Greene counties. There are career opportunities additionally available across the state of North Carolina, which has the second highest need in the nation according to employment statistics provided by the US Bureau of Labor Statistics. Estimated annual salaries for graduates seeking employment in North Carolina range from \$35,000 - \$47,800."

The direct services areas of Lenoir Community College (LCC), as well as neighboring services areas have shown high interest in a Electroneurodiagnostic Program. Lenoir County's community hospital, UNC Lenoir Healthcare, has approached LCC on several occasions regarding the need for high quality neurodiagnostic technologists. Their hospital currently offers in-patient and out-patient EEG studies, but would like to expand their services to include ambulatory EEG and long-term monitoring during the next fiscal year. Expanding their neurology services has been a high priority for several years, but they have encountered difficulties finding appropriately trained and credentialed technologists to join their team. In addition to the local hospital, UNC Neurology is located in our direct services area, and they offer nerve conduction studies. Their facility would additionally offer job opportunities to future graduates. A potential number of positions in LCC's service area and immediate adjacent areas is up to 15 at this time. Higher position possibilities is related to additional neurologic practices being established in Lenoir County, such as, Dr. Gregory Mieden, Neurology & Sleep Medicine Clinic with Regional Health.

LCC has also been approached by UNC Wayne Healthcare with similar needs. Their hospital offers not only in-patient and out-patient EEGs, but intra-operative monitoring as well. While their hospital is in a neighboring service area, their hospital is only thirty

minutes from our college. They regularly employ graduates from LCC's Nursing and Health Sciences programs, and have suggested on several occasions for LCC to add a Electroneurodiagnostic Program. UNC Wayne has made this suggestion to LCC, as opposed to their local community college, based on our existing Polysomnography Program which is part of the neurology umbrella. Their hospital took several months to fill their last neurodiagnostic technologist opening, which was due to low numbers of credentialed technologists in Eastern North Carolina as a whole.

When speaking to local and area hospitals, they all reiterate the need for neurodiagnostic technologists. If we could provide them with technologists, they would be able to expand the neurology offerings to their patients. For many patients needing specialized neurology services, they have to travel great distances to find a facility offering the procedure. Due to the reason, some patients do not have access to certain procedures due to health or financial reasons. Providing a new Electroneurodiagnostic Program at LCC would increase the number of trained and credentialed technologist, and allow healthcare facilities to expand their neurology services to better care for the patients in and around our direct service area.

- **Letters of support from local businesses, potential employers, etc. are helpful in support of a program such as this. I would highly recommend them.**

Letters of support are attached from the following: UNC Lenoir Healthcare, UNC Wayne Healthcare, Sleep Works-MedBridge Healthcare, and Durham VA Healthcare System-Sleep & Neurology Department.

- **An impact assessment for Wake Tech.**

According to the NCCCS Curriculum Program Application, Section III, Impact of Proposed Program on Other Programs in the System, only colleges approved to offer the same/similar program should be sent an impact statement. As you can see by the Program Planning Notification email that was sent October 13, 2017, Wake Tech is planning to offer the END program with a projected implementation date of fall 2019. At the time of this application and also as of today, under the NCCCS Education Catalog/Health Sciences section, Wake Tech CC is not listed with a similar program of Polysomnography, nor a same program of Electroneurodiagnostic Technology.

**From:** Sandra Lynne Dietrich <[sldietrich@waketech.edu](mailto:sldietrich@waketech.edu)>

**Sent:** Friday, October 13, 2017 1:49 PM

**To:** Chief Academic Officers ([cao@nccommunitycolleges.edu](mailto:cao@nccommunitycolleges.edu))

<[cao@nccommunitycolleges.edu](mailto:cao@nccommunitycolleges.edu)>; [cc-presidents@nccommunitycolleges.edu](mailto:cc-presidents@nccommunitycolleges.edu); Lisa Chapman ([chapmanl@nccommunitycolleges.edu](mailto:chapmanl@nccommunitycolleges.edu)) <[chapmanl@nccommunitycolleges.edu](mailto:chapmanl@nccommunitycolleges.edu)>;

[bedardw@nccommunitycolleges.edu](mailto:bedardw@nccommunitycolleges.edu); 'battsr@nccommunitycolleges.edu'

<[battsr@nccommunitycolleges.edu](mailto:battsr@nccommunitycolleges.edu)>

**Cc:** Molly Curry <[mpcurry@waketech.edu](mailto:mpcurry@waketech.edu)>

**Subject:** A45320 Program Planning Notification

***Curriculum Program Planning Notification***

(10/13/1017)

Wake Technical Community College intends to initiate a planning process for Electroneurodiagnostic Technology A45320.

The planning process is expected to be completed by May 2018, with program implementation in

Fall, 2019. The anticipated planning area to be served by this program is Wake.

The following colleges are located within the planning area for the new program: none.

For colleges interested in participating in the planning process or learning about this new program, the contact

person for the program planning process is Dr. Molly Curry 919-747-0007.

Sandra L. Dietrich  
VP of Curriculum Education Services  
Chief Academic Officer  
Wake Tech Community College  
9101 Fayetteville Road  
Raleigh, NC 27603  
919.866.5674

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
McDowell Technical Community College  
Applied Engineering Technology (A40130)**

**Program Planning:** McDowell Technical Community College is seeking approval for the Applied Engineering Technology (A40130) program to begin Fall, 2019. The planning area is defined as the college's service area of McDowell County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at McDowell Technical Community College on December 20, 2018. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of McDowell 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.

**Program Rationale:** McDowell Technical Community College (MTCC) indicates the following:

- Data from the U.S. Bureau of Labor Statistics indicated an annual growth rate of 5% for mechanical/electrical/process control technician jobs with a median salary of \$55,360.
- The U.S. Department of Labor Careeronestop for North Carolina listed 60 jobs state-wide for electrical and instrumentation engineering technicians and 399 for mechanical engineering technicians.
- The college reported that McDowell County is ranked third in the state for the percentage of its workforce that works in manufacturing. Area employers have stated that there is a widening advanced manufacturing skills-gap that is affecting their ability to find qualified individuals to fill their employment needs.
- Local manufacturers WestRock (Multi Packaging Solutions), Columbia Forest Products, and ABB Motors and Mechanical Incorporated have submitted letters of support to the college for the program.

- McDowell Chamber of Commerce has submitted a letter of support for the mechatronics and applied engineering programs, stating that there is a demand for qualified employees and for the programs in order to help prepare individuals to meet local manufacturers' hiring needs.
- Many of skill sets associated with mechatronics have crossover value beyond manufacturing within other types of service and repair industries.
- MTCC currently offers a successful Industrial Systems program. The transition to applied engineering technology (generalist) will help fill an existing gap in automation and process control competencies necessary for employee success in advanced manufacturing facilities.

**Impact of the Proposed Program on Other Programs:** Five community colleges are approved to offer the Applied 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 to solve technical problems in various types of industry. The course work emphasizes analytical and problem-solving skills. The curriculum includes courses in safety, math, physics, electricity, engineering technology, and technology-specific specialty areas. Graduates should qualify for employment in a wide range of positions in research and development, manufacturing, sales, design, inspection, or maintenance. Employment opportunities exist in automation, computer, electrical, industrial, or mechanical engineering fields, where graduates will function as engineering technicians.

**Contact(s):**

Dr. Frank Sculetta  
Senior Program Administrator

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
McDowell Technical Community College  
Cyber Crime Technology (A55210)**

**Program Planning:** McDowell Technical Community College is seeking approval for the Cyber Crime Technology (A55210) program to begin Fall 2019. The planning area is defined as the college's service area of McDowell County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at McDowell Technical Community College on November 8, 2018. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of McDowell 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.

**Program Rationale:** McDowell Technical Community College (MTCC) indicates the following:

- According to the U.S. Bureau of Labor Statistics, employment of information security analysts is projected to grow 28 percent (28,500 Jobs) from 2016 to 2026, much faster than the average for all occupations.
- According to the 2017 U.S. Bureau of Labor Statistics, the median hourly pay for Information Security Analysts is \$45.92 per hour.
- Graduates of the proposed program will also be able to pursue entrepreneurial opportunities.
- According to the NC Works website there are 126 jobs related to information security in the Northwest prosperity zone, and the Region C Workforce Development Board area.
- McDowell Technical Community College has a bilateral agreement with Western Governors University to allow students to pursue higher education opportunities after graduating from the proposed program.
- In November 2018, the college conducted a survey of 100 McDowell Academy for Innovation (MAI) and Career and College Promise students. Twenty percent (20) of the students expressed interest in the proposed Cyber Crime program.

- Chief Alan Lawrence of the Marion Police Department submitted a letter of support and indicated: *“Finding qualified employees is of paramount importance to improve and maintain our ability to investigate and prosecute cybercrime. Looking at the larger picture of law enforcement, this same need exists on a national scale. I look forward to expanding our partnership and offering programs that benefit our students, workforce and the community.”*
- Sherriff Ricky Buchanan of McDowell County Sheriff Department submitted a letter of support and indicated: *“This program will provide students in our community with the necessary skills and degree to work in the field of computer crime investigations and private security.”*
- Tracey Wildmann, Principal of the McDowell Academy of Innovation High School submitted a letter of support and indicated: *“Our focus is STEM careers and the Cyber Crime Technology program perfectly fits that focus.”*
- Steve Bush, Executive Director of the McDowell Chamber of Commerce submitted a letter of support and indicated: *“It is my pleasure to support the new Cyber Crime Technology program...I look forward to expanding our partnership and offering programs that benefit our students, workforce, and community.”*

**Impact of the Proposed Program on Other Programs:** Five community colleges are approved to offer the Cyber Crime Technology program. None of those colleges are contiguous to McDowell Technical Community College; therefore, **impact assessments were 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:** *This curriculum will prepare students to enter the field of computer crime investigations and private security. Students completing this curriculum will be capable of investigating computer crimes, properly seize and recover computer evidence and aid in the prosecution of cyber criminals. Course work in this curriculum will include a division of work in the disciplines of criminal justice and computer information systems. Additionally, students will be required to take specific cyber crime classes. Graduates should qualify to become computer crime investigators for local or state criminal justice agencies. Also, these graduates should be competent to serve as computer security specialists or consultants with private business.*

**Contact(s):**

Dr. Hilmi Lahoud  
Senior Program Administrator

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

**Program Planning:** McDowell Technical Community College is seeking approval for the Mechatronics Engineering Technology (A40350) program to begin Fall, 2019. The planning area is defined as the college's service area of McDowell County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at McDowell Technical Community College on December 20, 2018. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of McDowell 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.

**Program Rationale:** McDowell Community College (MTCC) indicates the following:

- Data from the U.S. Bureau of Labor Statistics indicated an annual growth rate of 4% for electro-mechanical technician jobs with a median salary of \$56,740.
- The U.S. Department of Labor Careeronestop for North Carolina listed 60 jobs state-wide for electrical and instrumentation engineering technicians and 399 for mechanical engineering technicians.
- The college reported that McDowell County is ranked third in the state for the percentage of its workforce that works in manufacturing. Area employers have stated that there is a widening advanced manufacturing skills-gap that is affecting their ability to find qualified individuals to fill their employment needs.
- Local manufacturers WestRock (Multi Packaging Solutions), Columbia Forest Products, and ABB Motors and Mechanical Incorporated have submitted letters of support to the college for the program.
- McDowell Chamber of Commerce has submitted a letter of support for the mechatronics and applied engineering programs, stating that there is a demand for

qualified employees and for the programs in order to help prepare individuals to meet local manufacturers' hiring needs.

- Many of skill sets associated with mechatronics have crossover value beyond manufacturing within other types of service and repair industries.
- MTCC currently offers a successful Industrial Systems program. The transition to mechatronics will help fill an existing gap in automation and process control competencies necessary for employee success in advanced manufacturing facilities.

**Impact of the Proposed Program on Other Programs:** Twenty-one community 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.

**Contact(s):**

Dr. Frank Scuiletti  
Senior Program Administrator