STATE BOARD OF COMMUNITY COLLEGES

CURRICULUM PROGRAM APPLICATION *[FTFA*]*
(Existing Program)

The State Board of Community Colleges is asked to approve the curriculum program 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.

Central Piedmont Community College
Cosmetology (A55140)

College of The Albemarle
Mechanical Engineering Technology (A40320)

Mitchell Community College
Digital Media Technology (A25210)

Pitt Community College
Horticulture Technology (A15240)

Wilkes Community College
Radiography (A45700)

Contact Person:
Jennifer Frazelle, Director
Academic Programs
919.807.7120
frazellej@nccommunitycolleges.edu

Fast Track for Action

PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Central Piedmont Community College
Cosmetology (A55140)

I. Program Planning

Central Piedmont Community College (CPCC) is seeking approval for the Cosmetology (A55140) program to begin Fall 2013. The planning area is defined as the college's service area of Mecklenburg County.

The proposed program was approved by the Board of Trustees at CPCC on October 26, 2012. 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.

II. Program Rationale

CPCC indicates the following**:**

- The Employment Security Commission of North Carolina reported the demand for hairdresser, hairstylists and cosmetologists is expected to increase by 14% by 2018. The expected trend increase nationally is 20% by 2018.
- Employers of cosmetologists are supportive of this proposed new program for Mecklenburg County.
- There are 22 private beauty/cosmetology schools in Charlotte-Mecklenburg, however most charge between $20,000-$30,000 to complete their program. Offering the Cosmetology program at CPCC will provide a less expensive option for students in this region while helping to meet the workforce demand.

III. Impact of the Proposed Program on Other Programs

There are 50 community colleges approved to offer the Cosmetology program. Of those 50, two colleges are in contiguous counties (Gaston College and Rowan-Cabarrus Community College). An impact assessment was sent to both colleges. Neither college expressed objections to the proposed program.

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.

Coordinator: Mr. Antonio Jordan

C. Institutional Certification: *Complete the following form and obtain required signatures. Form with original signatures should be included in the application.*

Institutional Certification

This curriculum program: Cosmetology, Associate Degree (A55140)
(Program Title) (Program Code)

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.

Central Piedmont Community College
(Community College Name)

has assessed the need for this program and the resources required to maintain a viable program and certifies that the college can operate this program efficiently and effectively within the resources available to the college.

The college understands that this proposed program will require a program accountability report that will include items such as student success measures, enrollment trends, completion rates, and employment data three years after implementation if the program is approved by the State Board.

(A copy of the minutes from the Board of Trustees meeting(s) where the proposed program was discussed and approved must be attached to the application.)

Signature, President of College — *Date* 10-26-12

Signature, Board of Trustees Chair — *Date* 10-26-12

CURRICULUM STANDARD

Effective Term
Spring 2009
*[2009*01]*

Curriculum Program Title	**Cosmetology**	Code	**A55140**
Concentration	**(not applicable)**		

Curriculum Description

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (3)]

I. **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. **Major Hours**. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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

Major Hours

[ref. 23 NCAC 02E.0204 (3)]

A. Core. The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.

B. Concentration *(if applicable).* A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.

C. Other Major Hours. Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

Cosmetology A55140**

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**34 SHC**	**34 SHC**
A. CORE *Courses required for the diploma are designated with ** **Required Courses:** * COS 111 Cosmetology Concepts I 4 SHC * COS 112 Salon I 8 SHC * COS 113 Cosmetology Concepts II 4 SHC * COS 114 Salon II 8 SHC * COS 115 Cosmetology Concepts III 4 SHC * COS 116 Salon III 4 SHC **Required Subject Areas:** *** Cosmetology** Select from any COS curriculum course 2 SHC	**34 SHC**	**34 SHC**	**34 SHC**
B. CONCENTRATION *(Not applicable)*			
C. OTHER MAJOR HOURS *To be selected from the following prefixes:* ACC, ART, BUS, CIS, *COE, COS, CSC, CTS, DBA, DRA, ISC, PSY, and WEB *Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.* *The use of COE for Cosmetology students is limited to 10% of a student's training period [21 NCAC 14J.0208 (3)]. For additional details, see the *Curriculum Procedures Reference Manual*, Section 20, IV-C.			**NA**
D. OTHER REQUIRED HOURS	0-7	0-4	**NA**

*** This program is approved by the State Board of Community Colleges to exceed maximum standard hours for a certificate program [ref. 23 NCAC 02E.0201(d)] . See also Community College Numbered Memo CC-98-218.*

Approved by the State Board of Community Colleges on November 13, 1996; Revised 4/28/97, 7/17/98; SBCC Revised 5/17/02; Revised 11/13/06; SBCC Revised 09/19/08; SBCC Template Revised 10/17/08; Editorial revision 12/12/12.

PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
College of The Albemarle
Mechanical Engineering Technology (A40320)

I. Program Planning

College of The Albermarle is seeking approval for the Mechanical Engineering Technology (A40320) program to begin Fall 2013. The planning area is defined as the college's service area of Pasquotank, Perquimans, Gates, Chowan, Currituck, Dare, and Camden counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at COA on August 14, 2012. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of COA 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

College of The Albermarle indicated the following**:**

- College advisory boards have indicated that there is a trend in regional industries requiring skill sets that are associated with mechanical engineering technology (MET) and machining.
- The aviation service and repair industry continues to grow in COA's service area. Many companies have reported that they have found it necessary to hire skilled workers from outside the area to fill employment needs in aviation and supporting industries.
- Local employers including A.R. Chesson Construction Company, Command Decisions Systems and Solutions, Hockmeyer Equipment Company, U.S. Coast Guard Aircraft Repair & Supply Center, Hyman & Robey, and DRS Technologies stated that there would be employment positions available for graduates of a mechanical engineering technology program.
- The U.S. Coast Guard Base in Elizabeth City and related aviation support industries have proven to be very steady employers, even in an economic downturn, and have a need for employees with computer-assisted manufacturing and computer-aided drafting (CAM/CAD) skill sets commonly associated with MET.

III. Impact of the Proposed Program on Other Programs

Twenty-four community colleges are approved to offer the MET program. Beaufort CC is the only approved college contiguous to the service area of College of The Albermarle. BCC agrees that there will be no negative impact to their program.

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.

Coordinator: Mr. Frank Scuiletti

C. Institutional Certification: *Complete the following form and obtain required signatures. Form with original signatures should be included in the application.*

Institutional Certification

This curriculum program Mechanical Engineering Technology *(Program Title)* A40320 *(Program Code)*

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.

College of The Albemarle
(Community College Name)

has assessed the need for this program and the resources required to maintain a viable program and certifies that the college can operate this program efficiently and effectively within the resources available to the college.

The college understands that this proposed program will require a program accountability report that will include items such as student success measures, enrollment trends, completion rates, and employment data three years after implementation if the program is approved by the State Board.

(A copy of the minutes from the Board of Trustees meeting(s) where the proposed program was discussed and approved must be attached to the application.)

Kandi W. Stevens 11/9/12
Signature, President of College *Date*

11-9-12
Signature, Board of Trustees Chair *Date*

Curriculum Standard for Engineering and Technology: Mechanical Engineering Technology

Career Cluster: Science, Technology, Engineering, Mathematics**

Cluster Description: Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, and engineering) including laboratory and testing services, and research and development services.

Pathway: Engineering and Technology	**Effective Term:** Fall 2013 (2013*03)

Program Majors Under Pathway

Program Major / Classification of Instruction Programs (CIP) Code		Credential Level(s) Offered	Program Major Code
Mechanical Engineering Technology	CIP Code: 15.0805	AAS/Diploma/Certificate	A40320

Pathway Description: These curriculums 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.

Program Description: Choose one of the following 4th paragraphs to use in conjunction with the first three paragraphs of the pathway description above for documentation used to identify each Program Major:

Mechanical Engineering Technology: A course of study that prepares the students to use basic engineering principles and technical skills to design, develop, test, and troubleshoot projects involving mechanical systems. Includes instruction in principles of mechanics, applications to specific engineering systems, design testing procedures, prototype and operational testing and inspection procedures, manufacturing system-testing procedures, test equipment operation and maintenance, computer applications, critical thinking, planning and problem solving, and oral and written communications. Graduates of the curriculum will find employment opportunities in the manufacturing or service sectors of engineering technology. Engineering technicians may obtain professional certification by application to organizations such as ASQC, SME, and NICET.

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

Approved by the State Board of Community Colleges on August 16, 2012; Editorial revision 12/12/12.

I. General Education Academic Core

[*Curriculum Requirements for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204(3)]*: *Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.*

Engineering and Technology: Mechanical Engineering Technology

General Education Academic Core			**AAS**	**Diploma**	**Certificate**
Minimum General Education Hours Required:			**15 SHC**	**6 SHC**	**0 SHC**
Courses listed below are recommended general education courses for this curriculum standard. Colleges may choose to include additional or alternative general education courses to meet local curriculum needs.					
Communications:			**6 SHC**	**3-6 SHC**	**Optional**
*COM 101	Workplace Communication	3 SHC			
COM 110	Introduction to Communication	3 SHC			
COM 120	Intro Interpersonal Com	3 SHC			
COM 231	Public Speaking	3 SHC			
*ENG 101	Applied Communications I	3 SHC			
*ENG 102	Applied Communications II	3 SHC			
ENG 110	Freshman Composition	3 SHC			
ENG 111	Expository Writing	3 SHC			
ENG 114	Professional Research & Reporting	3 SHC			
ENG 116	Technical Report Writing	3 SHC			
Humanities/Fine Arts:			**3 SHC**	**0-3 SHC**	**Optional**
*HUM 101	Values in the Workplace	2 SHC			
HUM 110	Technology and Society	3 SHC			
HUM 115	Critical Thinking	3 SHC			
HUM 230	Leadership Development	3 SHC			
PHI 230	Introduction to Logic	3 SHC			
PHI 240	Introduction to Ethics	3 SHC			
Social/Behavioral Sciences:			**3 SHC**	**0-3 SHC**	**Optional**
ECO 151	Survey of Economics	3 SHC			
ECO 251	Prin of Microeconomics	3 SHC			
GEO 110	Introduction to Geography	3 SHC			
GEO 111	World Regional Geography	3 SHC			
GEO 131	Physical Geography I	4 SHC			
*PSY 101	Applied Psychology	3 SHC			
*PSY 102	Human Relations	2 SHC			
PSY 118	Interpersonal Psychology	3 SHC			
PSY 135	Group Processes	3 SHC			
PSY 150	General Psychology	3 SHC			
*SOC 105	Social Relationships	3 SHC			
SOC 210	Introduction to Sociology	3 SHC			
SOC 215	Group Process	3 SHC			
Natural Sciences/Mathematics:			**3 SHC**	**0-3 SHC**	**Optional**
MAT 120	Geometry and Trigonometry	3 SHC			
MAT 121	Algebra/Trigonometry I	3 SHC			
MAT 161	College Algebra	3 SHC			
MAT 171	Precalculus Algebra	3 SHC			
MAT 175	Precalculus	4 SHC			
MAT 223	Applied Calculus	3 SHC			
MAT 271	Calculus I	4 SHC			

II. Major Hours. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. Below is a description of each section under Major Hours.

A. Technical Core. The technical core is comprised of specific courses which are required for all Program Majors under this Curriculum Standard. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the curriculum core courses or core subject area of the AAS program.

B. Program Major(s). The Program Major must include a minimum of 12 semester hours credit from required subjects and/or courses. The Program Major is in addition to the technical core.

C. Other Major Hours. Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core.

Engineering and Technology: Mechanical Engineering Technology			**AAS**	**Diploma**	**Certificate**
Minimum Major Hours Required:			**49 SHC**	**30 SHC**	**12 SHC**
A. Technical Core:			**21-24 SHC**		
Engineering Fundamentals					
Pick One Set:					
EGR 250	Statics and Strength of Mat	5 SHC *or*			
EGR 251	Statics	3 SHC			
AND					
EGR 252	Strength of Materials	3 SHC			
Two-Dimensional Drawing					
Choose one:					
DFT 151	CAD I	3 SHC			
DFT 170	Engineering Graphics	3 SHC			
EGR 120	Eng and Design Graphics	3 SHC			
Three-Dimensional Drawing					
Choose one:					
DFT 153	CAD III	3 SHC			
DFT 154	Intro Solid Modeling	3 SHC			
Fluid Mechanics					
Choose one:					
HYD 110	Hydraulics/Pneumatics I	3 SHC			
HYD 180	Pneumatics in Automation	3 SHC			
MEC 265	Fluid Mechanics	3 SHC			
Manufacturing					
Choose one set:					
MEC 145	Mfg Materials I	3 SHC *or*			
MEC 161	Manufacturing Processes I	3 SHC			
AND					
MEC 180	Engineering Materials	3 SHC			
Physics					
Choose one:					
PHY 131	Physics – Mechanics	4 SHC			
PHY 151	College Physics I	4 SHC			
B. Program Major(s): Not applicable					

C. Other Major Hours. ***To be selected from the following prefixes:*** ALT, ARC, ATR, BAT, BMT, BPR, BTC, BUS, CEG, CET, CIS, CMT, CTI, CTS, COE, CHM, CIV, CSC, DBA, DDF, DEA, DFT, EGR, ELC, ENV, ELN, EPP, FBG, FMW, GIS, HYD, IMS, ISC, ITN, LEO, LOG, MAC, MAT, MEC, MLG, MNT, NAN, NDE, NET, NOS, NUC, OMT, OSS, PCI, PHY, PLA, PMT, PPT, RCT, SST, TCT, TNE, WLD

Approved by the State Board of Community Colleges on August 16, 2012; Editorial revision 12/12/12.

Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.

III. Other Required Hours

A college may include courses to meet graduation or local employer requirements in a certificate (0-1 SHC), diploma (0-4 SHC), or an associate in applied science (0-7 SHC) program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

IV. Employability Competencies

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

A. Interpersonal Skills and Teamwork – The ability to work effectively with others, especially to analyze situations, establish priorities, and apply resources for solving problems or accomplishing tasks.

B. Communication – The ability to effectively exchange ideas and information with others through oral, written, or visual means.

C. Integrity and Professionalism – Workplace behaviors that relate to ethical standards, honesty, fairness, respect, responsibility, self-control, criticism and demeanor.

D. Problem-solving – The ability to identify problems and potential causes while developing and implementing practical action plans for solutions.

E. Initiative and Dependability – Workplace behaviors that relate to seeking out new responsibilities, establishing and meeting goals, completing tasks, following directions, complying with rules, and consistent reliability.

F. Information processing – The ability to acquire, evaluate, organize, manage, and interpret information.

G. Adaptability and Lifelong Learning – The ability to learn and apply new knowledge and skills and adapt to changing technologies, methods, processes, work environments, organizational structures and management practices.

H. Entrepreneurship – The knowledge and skills necessary to create opportunities and develop as an employee or self-employed business owner.

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

Summary of Required Semester Hour Credits (SHC) for each credential:

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

Approved by the State Board of Community Colleges on August 16, 2012; Editorial revision 12/12/12.

PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Mitchell Community College
Digital Media Technology (A25210)

I. Program Planning

Mitchell Community College is seeking approval for the Digital Media Technology (A25210) program to begin Fall 2013. 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 on October 25, 2012. 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:

- Businesses need to hire graduates that are well versed in the various medias used in marketing, and students are showing a strong interest in the Digital Media Technology program.
- In addition to traditional job opportunities, it is noted that a career in digital media technology is especially suitable for self-employment.
- The change from Web Technologies to Digital Media Technology is supported by information provided from members of the advisory committee, design needs of local businesses presented to our Cooperative Education program, and students currently fulfilling their cooperative education requirements.
- The proposed program will replace the existing Web Technologies (A25290) program at Mitchell Community College.
- Graphic designers with web site design and animation experience will especially be needed as demand increases for design projects for interactive media – web sites, mobile phones, and other technology," as stated by the US Bureau of Labor Statistics.

III. Impact of the Proposed Program on Other Programs

Two community colleges are approved to offer the Digital Media Technology (A25210) program. These programs are located at colleges which are not contiguous to the service area of Mitchell Community College.

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.

Coordinator: Dr. Hilmi A. Lahoud

I. Institutional Certification: *Complete the following form and obtain required signatures. Form with original signatures should be included in the application.*

Institutional Certification

This curriculum program: Digital Media Technology *(Program Title)* A25210 *(Program Code)*

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.

Mitchell Community College
(Community College Name)

has assessed the need for this program and the resources required to maintain a viable program and certifies that the college can operate this program efficiently and effectively within the resources available to the college.

The college understands that this proposed program will require a program accountability report that will include items such as student success measures, enrollment trends, completion rates, and employment data three years after implementation if the program is approved by the State Board.

(A copy of the minutes from the Board of Trustees meeting(s) where the proposed program was discussed and approved must be attached to the application.)

James T. Brewer _____ 11/28/2012
Signature, President of College *Date*

Ralph Bentley _____ 11-15-12
Signature, Board of Trustees Chair *Date*

CURRICULUM STANDARD

Effective Term
Fall 2011
*[2011*03]*

Curriculum Program Title	**Digital Media Technology**	Code	**A25210**
Concentration	**(not applicable)**		

Curriculum Description

The Digital Media program prepares students for entry-level jobs in the digital design and multimedia industry. Students learn to synthesize multimedia, hypertext, computer programming, information architecture, and client/server technologies using both Internet and non-network-based media.

Students develop skills in communication, critical thinking, and problem solving as well as interface design, multimedia formats, application programming, data architecture, and client/server technologies. The program develops technical skills through practical applications that employ current and emerging standards and technologies.

Graduates should qualify for employment as web designers, graphic artists/designers, multimedia specialists, web developers, web content specialists, media specialists, information specialists, digital media specialists, animation specialists, interface designers, and many new jobs yet to be defined in this expanding field.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204(3)]

I. General Education. Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. Major Hours. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. Other Required Hours. A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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

Major Hours

[ref. 23 NCAC 02E.0204 (3)]

A. Core. The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.

B. Concentration *(if applicable).* A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.

C. Other Major Hours. Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

Digital Media Technology A25210

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. CORE **Required Courses:** CIS 115 Intro to Prog & Logic 3 SHC DME 110 Intro to Digital Media 3 SHC DME 115 Graphic Design Tools 3 SHC DME 120 Intro to Multimedia Applications 3 SHC DME 130 Digital Animation I 3 SHC WEB 210 Web Design 3 SHC **Required Subject Areas:** **Basic Computer Skills. Select one:** CIS 110 Introduction to Computers 3 SHC CIS 111 Basic PC Literacy 2 SHC	**20-21 SHC**		
B. CONCENTRATION *(not applicable)*			
C. OTHER MAJOR HOURS *To be selected from the following prefixes:* ART, CIS, COE, CSC, CTS, DBA, DEA, DME, FVP, GIS, GRA, GRD, ITN, SGD, and WEB *Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.*			

PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Pitt Community College
Horticulture Technology (A15240)

I. Program Planning

Pitt Community College is seeking approval for the Horticulture Technology (A15240) program to begin late Spring 2013 (condensed 10-week format). The planning area is defined as the college's service area of Pitt County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Pitt on December 13, 2011. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Pitt 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

Pitt Community College indicates the following:

- Pitt County has many commercial nurseries, athletic fields, and golf courses that require horticultural services.
- Local employers indicate the need for a program to train new employees in horticultural practices and landscape maintenance.
- According to employment projections prepared by Economic Modeling Specialists, Inc. (EMSI), the number of positions in landscaping, lawn service, and grounds maintenance in Pitt County will increase by 13% during the period 2011-2016.

III. Impact of the Proposed Program on Other Programs

Eighteen community colleges are approved to offer the Horticulture Technology program. Impact assessment forms were sent to the two colleges in contiguous counties. No colleges expressed objections.

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.

Coordinator: Ms. Elizabeth Spragins

C. Institutional Certification: *Complete the following form and obtain required signatures. Form with original signatures should be included in the application.*

Institutional Certification

This curriculum program Horticulture Technology *(Program Title)* A15240 *(Program Code)*

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.

Pitt Community College
(Community College Name)

has assessed the need for this program and the resources required to maintain a viable program and certifies that the college can operate this program efficiently and effectively within the resources available to the college.

The college understands that this proposed program will require a program accountability report that will include items such as student success measures, enrollment trends, completion rates, and employment data three years after implementation if the program is approved by the State Board.

(A copy of the minutes from the Board of Trustees meeting(s) where the proposed program was discussed and approved must be attached to the application.)

Signature, President of College — *Date* 9/6/12

Signature, Board of Trustees Chair — *Date* 9/6/12

Curriculum Standard for Plant Systems: Horticultural Science Technology

Career Cluster: Agriculture, Food, and Natural Resources **

Cluster Description: The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fuel, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Pathway: Plant Systems | **Effective Term:** Fall 2013 (2013*03)

Program Majors Under Pathway

Program Major / Classification of Instruction Programs (CIP) Code		Credential Level(s) Offered	Program Major Code
Golf Course Management Technology	CIP Code 31.0302	AAS/Diploma/Certificate	A15230
Horticulture Technology	CIP Code: 01.0601	AAS/Diploma/Certificate	A15240
Landscape Gardening	CIP Code 01.0605	AAS/Diploma/Certificate	A15260
Turfgrass Management Technology	CIP Code: 01.0607	AAS/Diploma/Certificate	A15420

Pathway Description:

These curricula are designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

*Program Major Description: Choose one of the following **4th paragraphs** to use in conjunction with the first three paragraphs of the pathway description above for documentation used to identify each **Program Major:***

Golf Course Management Technology: A program that prepares individuals to manage the operation of golf courses. Potential course work includes instruction in turf grass science and management, golf course design and construction, grounds equipment and operation, pest control, and grounds management.

Horticulture Technology: A program that focuses on the general production and management of cultivated plants, shrubs, flowers, foliage, trees, groundcovers, and related plant materials; the management of technical and business operations connected with horticultural services; and the basic scientific principles needed to understand plants and their management and care.

Landscape Gardening: A program that prepares individuals to manage and maintain indoor and/or outdoor ornamental and recreational plants and groundcovers and related conceptual designs established by landscape architects, interior designers, enterprise owners or managers, and individual clients. Potential course work includes instruction in applicable principles of horticulture, gardening, plant and soil irrigation and nutrition, turf maintenance, plant maintenance, equipment operation and maintenance, personnel supervision, and purchasing.

Turfgrass Management Technology: A program that focuses on turfgrasses and related groundcover plants and prepares individuals to develop ornamental or recreational grasses and related products; plant, transplant, and manage grassed areas; and to produce and store turf used for transplantation. Potential course work includes instruction in applicable plant sciences, genetics of grasses, turf science, use analysis, turf management, and related economics.

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

Approved by the State Board of Community Colleges on August 16, 2012; Editorial revision 11/07/12; Editorial revision 12/12/12.

I. General Education Academic Core

[*Curriculum Requirements for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204(3)]*: *Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.*

Plant Systems: Horticultural Science Technology

Recommended General Education Academic Core		AAS	Diploma	Certificate
Minimum General Education Hours Required:		**15 SHC**	**6 SHC**	**0 SHC**
Courses listed below are recommended general education courses for this curriculum standard. Colleges may choose to include additional or alternative general education courses to meet local curriculum needs.				
Communication:				
*COM 101 Workplace Communication	3 SHC	**6 SHC**	**3-6 SHC**	**Optional**
COM 110 Introduction to Communication	3 SHC			
COM 120 Intro Interpersonal Com	3 SHC			
COM 231 Public Speaking	3 SHC			
*ENG 101 Applied Communications I	3 SHC			
*ENG 102 Applied Communications II	3 SHC			
ENG 110 Freshman Composition	3 SHC			
ENG 111 Expository Writing	3 SHC			
ENG 112 Argument-Based Research	3 SHC			
ENG 114 Prof Research & Reporting	3 SHC			
ENG 115 Oral Communication	3 SHC			
ENG 116 Technical Report Writing	3 SHC			
Humanities/Fine Arts:				
*HUM 101 Values in the Workplace	2 SHC	**3 SHC**	**0-3 SHC**	**Optional**
HUM 110 Technology and Society	3 SHC			
HUM 115 Critical Thinking	3 SHC			
HUM 230 Leadership Development	3 SHC			
PHI 230 Introduction to Logic	3 SHC			
PHI 240 Introduction to Ethics	3 SHC			
Social /Behavioral Sciences:				
ECO 151 Survey of Economics	3 SHC			
ECO 251 Prin of Microeconomics	3 SHC			
GEO 110 Introduction to Geography	3 SHC	**3 SHC**	**0-3 SHC**	**Optional**
GEO 111 World Regional Geography	3 SHC			
*PSY 101 Applied Psychology	3 SHC			
*PSY 102 Human Relations	2 SHC			
PSY 118 Interpersonal Psychology	3 SHC			
PSY 135 Group Processes	3 SHC			
PSY 150 General Psychology	3 SHC			
*SOC 105 Social Relationships	3 SHC			
SOC 210 Introduction to Sociology	3 SHC			
SOC 215 Group Processes	3 SHC			
Natural Sciences/Mathematics:				
BIO 140 Environmental Biology	3 SHC			
BIO 160 Introductory Life Science	3 SHC			
*MAT 101 Applied Mathematics I	3 SHC	**3 SHC**	**0-3 SHC**	**Optional**
MAT 110 Mathematical Measurement	3 SHC			
MAT 115 Mathematical Models	3 SHC			
MAT 120 Geometry and Trigonometry	3 SHC			
MAT 121 Algebra/Trigonometry I	3 SHC			
MAT 140 Survey of Mathematics	3 SHC			
MAT 151 Statistics I	3 SHC			
MAT 155 Statistical Analysis	3 SHC			
PHY 110 Conceptual Physics	3 SHC			

PHY 121 Applied Physics I 4 SHC			

II. Major Hours. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. Below is a description of each section under Major Hours.

A. Technical Core. The technical core is comprised of specific courses which are required for all Program Majors under this Curriculum Standard. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the curriculum core courses or core subject area of the AAS program.

B. Program Major(s). The Program Major must include a minimum of 12 semester hours credit from required subjects and/or courses. The Program Major is in addition to the technical core.

C. Other Major Hours. Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from each prefix listed, with the exception of prefixes listed in the core or other Major Areas.

Plant Systems: Horticultural Science	**AAS**	**Diploma**	**Certificate**
Minimum Major Hours Required:	**49 SHC**	**30 SHC**	**12 SHC**
A. Technical Core:			
Plant Identification. Choose one:	**35-38 SHC**	**9-12 SHC**	
HOR 160 Plant Materials I 3 SHC			
TRF 110 Intro Turfgrass Cult & ID 4 SHC			
Pest Management. Choose one:			
HOR 164 Hort Pest Mgmt 3 SHC			
TRF 240 Turfgrass Pest Control 3 SHC			
Design. Choose one.			
HOR 112 Landscape Design I 3 SHC			
^TRF 120 Turf Irrigat & Design 4 SHC			
TRF 151 Intro Landscape Design 3 SHC			
Soil Science. Choose one.			
AGR 170 Soil Science 3 SHC			
HOR 166 Soils and Fertilizers 3 SHC			
LSG 111 Basic Landscape Technique 2 SHC			
B. Program Major(s):			
Golf Course Management			
#GCM 220 Golf Course Maint Systems 3 SHC			
#GCM 230 Golf Course Org and Admin 3 SHC			
#GCM 240 Golf Course Design 3 SHC			
Select additional courses from the GCM prefix for a minimum of 12 SHC for the Golf Course Management AAS program.			
Courses required for the Golf Course Management Diploma are designated with #			

B. Program Major(s)(Continued)

Horticulture Science Technology

HOR	162 Applied Plant Science	3 SHC
HOR	168 Plant Propagation	3 SHC

Operations. Choose one:

HOR	124 Nursery Operations	3 SHC
HOR	134 Greenhouse Operations	3 SHC
LSG	121 Fall Gardening Lab	2 SHC

Select additional courses from the HOR or LSG prefix for a minimum of 12 SHC for the Horticulture Technology AAS program.

A Horticulture Technology diploma requires a minimum of 12 SHC extracted from the required technical/program major core of the AAS degree.

Landscape Gardening

Select a minimum of 12 SHC from the following courses for the Landscape Gardening AAS program:

COE	111 Co-op Work Experience I	1 SHC
+HOR	114 Landscape Construction	3 SHC
+HOR	134 Greenhouse Operations	3 SHC
+LSG	111 Basic Landscape Technique	2 SHC
+LSG	121 Fall Gardening Lab	2 SHC
+LSG	122 Spring Gardening Lab	2 SHC
LSG	123 Summer Gardening Lab	2 SHC
LSG	231 Landscape Supervision	4 SHC

Courses required for the Landscape Gardening Diploma are designated with +

Turfgrass Management Technology

TRF	152 Landscape Maintenance	3 SHC
^TRF	210 Turfgrass Eqmt Mgmt	3 SHC
^TRF	230 Turfgrass Mgmt Apps	2 SHC
TRF	260 Adv Turfgrass Mgmt	4 SHC

Courses required for the Turfgrass Management Diploma are designated with ^

C. Other Major Hours.

T*o be selected from the following prefixes:*

ACC, AGR, ANS, ARC, BIO, BTC, BUS, CHM, CIS, COE, CSC, CST, CUL, DFT, ECO, ETR, FOR, FWL, GCM, GIS, HET, HOR, IVS, LAR, LID, LSG, SEL, SST, TRF and VEN

Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.

III. Other Required Hours

A college may include courses to meet graduation or local employer requirements in a certificate (0-1 SHC), diploma (0-4 SHC), or an associate in applied science (0-7 SHC) program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

IV. Employability Competencies

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

A. Interpersonal Skills and Teamwork – The ability to work effectively with others, especially to analyze situations, establish priorities, and apply resources for solving problems or accomplishing tasks.

B. Communication – The ability to effectively exchange ideas and information with others through oral, written, or visual means.

C. Integrity and Professionalism – Workplace behaviors that relate to ethical standards, honesty, fairness, respect, responsibility, self-control, criticism and demeanor.

D. Problem-solving – The ability to identify problems and potential causes while developing and implementing practical action plans for solutions.

E. Initiative and Dependability – Workplace behaviors that relate to seeking out new responsibilities, establishing and meeting goals, completing tasks, following directions, complying with rules, and consistent reliability.

F. Information processing – The ability to acquire, evaluate, organize, manage, and interpret information.

G. Adaptability and Lifelong Learning – The ability to learn and apply new knowledge and skills and adapt to changing technologies, methods, processes, work environments, organizational structures and management practices.

H. Entrepreneurship – The knowledge and skills necessary to create opportunities and develop as an employee or self-employed business owner.

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

Summary of Required Semester Hour Credits (SHC) for each credential:

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

Approved by the State Board of Community Colleges on August 16, 2012; Editorial Revision 11/07/12; Editorial revision 12/12/12.

PROGRAM APPLICATION
SUMMARY EVALUATION REPORT
Wilkes Community College
Radiography (A45700)

I. Program Planning

Wilkes Community College is seeking approval for the Radiography (A45700) program to begin Fall 2013. The planning area is defined as the college's service area of Wilkes, Ashe, and Alleghany counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Wilkes Community College on October 11, 2012. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Wilkes 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

Wilkes Community College indicates the following:

- Wilkes Regional Medical Center (WRMC) has met the workforce needs for radiologic technologist for Wilkes Community College's three-county service area since their first students graduated in 1958. However, due to recent changes to the licensing requirements, graduates of Radiography programs must hold an associate's degree in order to sit for the licensing exam. WRMC is not accredited as an institution of higher education and is unable to confer an associate's degree. As a result of the change, WRMC has requested that Wilkes Community College offer the program to ensure that the workforce needs of the services area continue to be met.

- According to projections prepared by Economic Modeling Specialists, Inc. (EMSI), Wilkes service area will experience double-digit growth between 2012 and 2018 in the percentage of people between sixty-five and eighty-three years of age. An increasing aging population will have more medical conditions which require imaging to diagnose and treat. Radiologic technologists will be needed to maintain and use the diagnostic equipment.

- EMSI projects a twenty-one percent increase in healthcare and social assistance jobs between 2012-2018 in the service area. In particular, the High County Area Workforce Development Board has projected thirty-seven openings for radiologic technicians from 2006-2016.

- WRMC Radiography program's history indicates that the program is sustainable. The average entering class size for the program at WRMC for the past six years has been nine students. Wilkes Community Colleges proposes a cohort of ten students for each entering class and

anticipates a retention rate of seventy percent, which is consistent with the WRMC program for the same period and is consistent with other competitive enrollment health technology programs at the college.

- WRMC graduates who returned surveys indicated high rates of employment. Seventy-three percent of the responders indicated they were employed within six months of graduation, fourteen percent responded they were employed but did not specify their hire date, and one percent indicated they were furthering their education.

- A student interest survey completed by area high school juniors and seniors in 2011-2012, indicated there are seventy-five juniors and sixty-seven seniors interested in enrolling in the Radiography program full-time if it was available at Wilkes Community College.

- Although health and industry technology programs typically have higher operation costs than those in other areas, a cost to budget FTE analysis of the Radiography program shows that the program is sustainable with the FTE generated from an admission cohort of ten students and a projected retention rate of seventy percent thorough year two.

- WRMC has committed to fund the program for the first year of operation. The hospital has also committed to providing space to operate the program for at least three years, allowing time for the college to renovate space or to acquire space for the program.

- Offering the Radiography program will ensure that hospital and medical practitioners' needs for radiography technologists in the rural Wilkes Community College service area will continue to be met.

- It is important to note that the degree in Radiography serves as the foundation for other imaging technologies, e.g., Magnetic Resonance Imaging (MRI), computed tomography (CT), ultrasound and other specialized imaging technologies, as well as radiation therapy.

III. Impact of the Proposed Program on Other Programs

Twenty-four community colleges are approved to offer the Radiography program. An impact assessment was sent to each college. Initially, one college expressed objections due to a clinical site that may be utilized by Wilkes. 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.

Coordinator: Ms. Renee Batts

C. Institutional Certification: *Complete the following form and obtain required signatures. Form with original signatures should be included in the application.*

Institutional Certification

This curriculum program Radiography (*Program Title*) A45700 (*Program Code*)

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.

Wilkes Community College
(Community College Name)

has assessed the need for this program and the resources required to maintain a viable program and certifies that the college can operate this program efficiently and effectively within the resources available to the college.

The college understands that this proposed program will require a program accountability report that will include items such as student success measures, enrollment trends, completion rates, and employment data three years after implementation if the program is approved by the State Board.

(A copy of the minutes from the Board of Trustees meeting(s) where the proposed program was discussed and approved must be attached to the application.)

Signature, President of College — Date: 12/7/12

Signature, Board of Trustees Chair — Date: 12/7/12

CURRICULUM STANDARD

Effective Term
Spring 2010
*[2010*01]*

Curriculum Program Title	**Radiography**	Code	**A45700**
Concentration	**(not applicable)**		

Curriculum Description

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204(3)]

I. General Education. Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. Major Hours. AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*

III. Other Required Hours. A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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

Major Hours

[ref. 23 NCAC 02E.0204 (3)]

A. Core. The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.

B. Concentration *(if applicable).* A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.

C. Other Major Hours. Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

Radiography A45700

	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**
A. CORE	**53 SHC**	**NR**	
Required Courses:			
RAD 110 Radiography Introduction & Patient Care — 3 SHC			
RAD 111 Radiographic Procedures I — 4 SHC			
RAD 112 Radiographic Procedures II — 4 SHC			
RAD 121 Radiographic Imaging I — 3 SHC			
RAD 122 Radiographic Imaging II — 2 SHC			
RAD 131 Radiographic Physics I — 2 SHC			
RAD 151 RAD Clinical Education I — 2 SHC			
RAD 161 RAD Clinical Education II — 5 SHC			
RAD 171 RAD Clinical Education III — 4 SHC			
RAD 211 Radiographic Procedures III — 3 SHC			
RAD 231 Radiographic Physics II — 2 SHC			
RAD 241 Radiobiology/Protection — 2 SHC			
RAD 245 Image Analysis — 2 SHC			
RAD 251 RAD Clinical Education IV — 7 SHC			
RAD 261 RAD Clinical Education V — 7 SHC			
RAD 271 Radiography Capstone — 1 SHC			
Required Subject Areas: None			
B. CONCENTRATION *(Not applicable)*			
C. OTHER MAJOR HOURS *To be selected from the following prefixes:* BIO, CIS, COE, CSC, HSC, and RAD *Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.* .			

Approved by the State Board of Community Colleges on November 13, 1996; SBCC Revised 05/17/02; SBCC Revised 07/15/05; SBCC Revised 09/21/07; SBCC Template Revised 10/17/08; CRC Revised 03/26/09;Editorial Revision 12/12/12..