

**STATE BOARD OF COMMUNITY COLLEGES
CURRICULUM STANDARD REVISIONS**

The State Board is asked to approve revisions to the following curriculum standards:

Blue Ridge Community College
Early Childhood Education (A55220)

Carteret Community College
Aquaculture Technology (A15120)

Guilford Technical Community College
Aviation Electronics (Avionics) Technology (A60150)

Contact Person:

Ms. Jennifer Frazelle
Director

CURRICULUM STANDARD REVISION
Blue Ridge Community College

Early Childhood Education (A55220)

Blue Ridge Community College is seeking approval to revise the Early Childhood Education (A55220) curriculum standard, effective Spring 2017. The proposed revision follows:

- Revise current standard to cluster standard format.
- Remove the following course from the Technical Core Area:

EDU 271 Educational Technology

Rationale of Requesting College:

Technology has been integrated into the other core courses as part of the course revisions that will be acted upon by the Curriculum Review Committee in February 2016. Technology skills are needed across the curriculum, and should not be isolated to one course.

The cluster standard format allows the listing of general education courses that have been recommended by faculty as useful towards early childhood content. It also allows the listing of recommended UGETC courses which will assist with articulation.

Vote Results:

Colleges approved to offer the program: 58
Colleges in favor of recommendations: 51
Colleges opposed to recommendations: 2
Colleges not responding: 5

**The two opposing colleges feel that EDU 271 Educational Technology should remain in the technical core.*

Contact Person:

Dr. Lisa Eads
Program Coordinator

Proposed Career Cluster Standard

Curriculum Standard for Teaching/Training: Early Childhood Education			
Career Cluster: Education and Training**			
Cluster Description: Planning, managing, and providing education and training services, and related learning support services.			
Pathway: Teaching/Training		Effective Term: Spring 2017 (2017*01)	
Program Majors Under Pathway			
Program Major / Classification of Instruction Programs (CIP) Code	Instruction Programs (CIP)	Credential Level(s) Offered	Program Major Code
Early Childhood Education	CIP Code 13.1210	AAS/Diploma/Certificate	A55220
<p>Curriculum Description</p> <p>The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.</p> <p>Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.</p> <p>Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.</p> <p><i>Program Major Description: The following 4th paragraphs is used in conjunction with the first three paragraphs of the pathway description above for documentation used to identify the Program Major:</i></p> <p>Early Childhood Education: A program that prepares individuals to promote child development and learning, work with diverse families and children, observe, document and assess to support young children and families, use content knowledge to build meaningful curriculum, and use developmentally effective approaches in collaboration with other early childhood professionals. Potential course work includes instruction in all areas of child development such as emotional/social/health/physical/language/communication, approaches to play and learning, working with diverse families, and related observations/student teaching experiences.</p>			

*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.

I. General Education Academic Core Curriculum Requirements for associate degree, diploma, and certificate programs in accordance with ID SBCCC 400.97(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.

PROPOSED Teaching/Training: Early Childhood Education

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 gen education courses to meet local curriculum needs.			
Communication: COM 231 Public Speaking U 3 SHC ENG 111 Writing and Inquiry U 3 SHC ENG 112 Writing/Research in the Disc U 3 SHC	6 SHC	3-6 SHC	Optional
Humanities/Fine Arts: ART 111 Art Appreciation U 3 SHC ART 114 Art History Survey I U 3 SHC ART 115 Art History Survey II U 3 SHC ENG 231 American Literature I U 3 SHC ENG 232 American Literature II U 3 SHC MUS 110 Music Appreciation U 3 SHC MUS 112 Introduction to Jazz U 3 SHC PHI 215 Philosophical Issues U 3 SHC PHI 240 Introduction to Ethics U 3 SHC	3 SHC	0-3 SHC	Optional
Social /Behavioral Sciences: ECO 251 Prin of Microeconomics U 3 SHC ECO 252 Prin of Macroeconomics U 3 SHC HIS 111 World Civilizations I U 3 SHC HIS 112 World Civilizations II U 3 SHC HIS 131 American History I U 3 SHC HIS 132 American History II U 2 SHC POL 120 American Government U 3 SHC PSY 150 General Psychology U 3 SHC SOC 210 Introduction to Sociology U 3 SHC	3 SHC	0-3 SHC	Optional
Natural Sciences/Mathematics: AST 111 Descriptive Astronomy U 3 SHC AST 111A Descriptive Astronomy Lab U 1 SHC AST 151 General Astronomy I U 3 SHC AST 151A General Astronomy I Lab U 1 SHC BIO 110 Principles of Biology U 4 SHC BIO 111 General Biology I U 4 SHC BIO 112 General Biology II U 4 SHC CHM 151 General Chemistry I U 4 SHC CHM 152 General Chemistry II U 4 SHC GEL 111 Introductory Geology U 4 SHC MAT 143 Quantitative Literacy U 3 SHC MAT 152 Statistical Methods I U 4 SHC MAT 171 Precalculus Algebra U 4 SHC MAT 172 Precalculus Trigonometry U 4 SHC MAT 263 Brief Calculus U 4 SHC MAT 271 Calculus I U 4 SHC PHY 110 Conceptual Physics U 3 SHC PHY 110A Conceptual Physics Lab U 1 SHC PHY 151 College Physics I U 4 SHC PHY 152 College Physics II U 4 SHC PHY 251 General Physics I U 4 SHC PHY 252 General Physics II U 4 SHC	3 SHC	0-3 SHC	Optional

U indicates a Universal General Education Transfer Component (UGETC) course included in the Comprehensive Articulation Agreement. UGETC courses are guaranteed to transfer to any of the sixteen University of North Carolina senior institutions as equivalent credit within defined distribution limits.

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 hour credits 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.

PROPOSED Teaching/Training: Early Childhood Education	AAS	Diploma	Certificate
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Minimum Major Hours Required:	49 SHC	30 SHC	12 SHC
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<p>A. TECHNICAL CORE</p> <p><i>Courses required for the diploma are designated with *</i></p> <ul style="list-style-type: none"> * EDU 119 Intro to Early Child Education 4 SHC * EDU 131 Child, Family, & Community 3 SHC * EDU 146 Child Guidance 3 SHC * EDU 151 Creative Activities 3 SHC * EDU 153 Health, Safety & Nutrition 3 SHC * EDU 221 Children with Exceptional 3 SHC EDU 234 Infants, Toddlers & Twos 3 SHC EDU 271 Educational Technology 3 SHC EDU 280 Language & Literacy Experiences 3 SHC EDU 284 Early Child Capstone Practicum 4 SHC <p>B. Program Major:</p> <p>*Child Development. Select one set:</p> <ul style="list-style-type: none"> EDU 144 Child Development I 3 SHC & EDU 145 Child Development II 3 SHC <i>OR</i> PSY 244 Child Development I 3 SHC & PSY 245 Child Development II 3 SHC 	<p>38 SHC</p> <p>35 SHC</p>	<p>25 SHC</p>	
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C. OTHER MAJOR HOURS *The remaining other major hours may be chosen from the following prefixes:* ACC, ANT, ART, ASL, AST, BIO, BUS, CHM, CIS, COE, COM, CSC, CTS, DAN, DBA, DRA, ECO, EDU, ENG, FRE, GEO, GER, HEA, HIS, HUM, MUS, OST, PED, PHI, PHS, POL, PSY, REL, SCI, SOC, SPA, WBL, 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.

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.

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

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

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

CURRICULUM STANDARD REVISION
Carteret Community College

Aquaculture Technology (A15120)

Request: The State Board of Community Colleges is asked to approve Carteret Community College's request to revise the Aquaculture Technology (A15120) curriculum standard with an effective term of Fall 2017.

Proposed Revision: Add the following set of courses as an option to *CHM 151 General Chemistry I* in the Technical Core:

CHM 131 Introduction to Chemistry and
CHM 131A Introduction to Chemistry Lab

Rationale: Either CHM 151 or the combination of CHM 131 and 131A are appropriate courses to prepare students for a career in aquaculture technology. The range of subject matter covered in the two options are equivalent.

Vote Results:

Colleges approved to offer the program: 2

Colleges in favor of recommendations: 2

Colleges opposed to recommendations: 0

Contact:

Ms. Jennifer Frazelle
Director, Academic Programs

Curriculum Standard for Animal Systems: Aquaculture 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: Animal Systems		Effective Term: Summer 2015 (2015*02) Fall 2017 (2017*03)	
Program Majors Under Pathway			
Program Major / Classification of Instruction Programs (CIP) Code	CIP Code	Credential Level(s) Offered	Program Major Code
Aquaculture Technology	01.0303	AAS/Diploma/Certificate	A15120
Pathway Description:			
<p>The Aquaculture Technology curriculum prepares individuals for careers in aquaculture and management of aquatic ecosystems. It provides a broad background in science and math as well as specialized course work and practical experience in fish, shellfish, and aquatic plant production and management.</p> <p>Course work includes biology, chemistry, and math, as well as water quality and limnology, nutrition and feeding, genetics and breeding, facilities construction, and business. Students will spend time working in the industry through the cooperative work experience or conducting an individualized study through the aquaculture project.</p> <p>Graduates may find employment on private farms and government hatcheries or at public aquariums. Graduates may also start new businesses in fish, shellfish, or aquatic plant farming; pond and lake management services; or home/office aquarium or water garden management services.</p>			
<p><i>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:</i></p> <p>Aquaculture Technology. A program that prepares individuals to select, culture, propagate, harvest, and market domesticated fish, shellfish, and marine plants, both freshwater and saltwater. Potential course work includes instruction in the basic principles of aquatic and marine biology; health and nutrition of aquatic and marine life; design and operation of fish farms, breeding facilities, culture beds, and related enterprises; and related issues of safety, applicable regulations, logistics, and supply.</p>			
I. General Education Academic Core			
<p><i>[Curriculum Requirements for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97(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.</i></p>			

**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 09/08/12; Editorial Revision 12/14/12; SBCC Revised 07/19/13; Editorial Revision 08/21/13; CRC Revised—05/29/2014; Editorial Revision 12/10/14; Prefix Addition 08/01/15.

PROPOSED

Animal Systems: Aquaculture Technology							
Recommended General Education Academic Core	AAS	Diploma	Certificate				
Minimum General Education Hours Required:	15 SHC	6 SHC	0 SHC				
<p>Courses listed below are <i>recommended</i> general education courses for this curriculum standard. Colleges may choose to include additional or alternative general education courses to meet local curriculum needs.</p> <p>*Recommended certificate and diploma level curriculum courses. These courses may <u>not</u> be included in associate degree programs.</p>							
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:							
ART 111 Art Appreciation	3 SHC				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:							
ECO 151 Survey of Economics	3 SHC	3 SHC	0-3 SHC	Optional			
ECO 251 Prin of Microeconomics	3 SHC						
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				3 SHC	0-3 SHC	Optional
BIO 160 Introductory Life Science	3 SHC						
*MAT 101 Applied Mathematics I	3 SHC						
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						
MAT 171 Precalculus Algebra	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-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. Below is a description of each section under Major Hours.

Approved by the State Board of Community Colleges on August 16, 2012; Editorial Revision 09/08/12; Editorial Revision 12/14/12; SBCC Revised 07/19/13; Editorial Revision 08/21/13; CRC Revised—05/29/14; Editorial Revision 12/10/14; Prefix Addition 08/01/15; SBCC Revised_____.

PROPOSED

- 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.

Animal Systems: Aquaculture Technology	AAS	Diploma	Certificate
Minimum Major Hours Required:	49 SHC	30 SHC	12 SHC
<p>A. Technical Core:</p> <ul style="list-style-type: none"> *AQU 111 Aquaculture I 3 SHC *AQU 220 Aquaculture Facilities 3 SHC *BIO 111 General Biology I 4 SHC *CHM 151 General Chemistry I 4 SHC <li style="padding-left: 20px;">OR *CHM 131 Introduction to Chemistry 3 SHC <i>and</i> CHM 131A Introduction to Chemistry Lab 1 SHC <p>B. Program Major(s): Aquaculture Technology</p> <ul style="list-style-type: none"> *Culture Techniques. Choose one. <ul style="list-style-type: none"> AQU 112 Aquaculture II 3 SHC AQU 260 Aquariology 3 SHC * Business. Choose one: <ul style="list-style-type: none"> AQU 120 Aquabusiness 3 SHC BUS 110 Introduction to Business 3 SHC BUS 280 REAL Small Business 4 SHC * Culture Environment. Choose one: <ul style="list-style-type: none"> AQU 210 Limnology & Water Quality 3 SHC AQU 270 Water Gardens 3 SHC BIO 243 Marine Biology 4 SHC FWL 234 Aquatic Ecology 3 SHC Other. Choose one: <ul style="list-style-type: none"> AQU 280 Aquaculture Project 2 SHC WBL 112 Work-Based Learning I 2 SHC <p><i>Select additional "Other" courses from the AQU, BIO, BUS, or FWL prefix for a minimum of 12 SHC for the Aquaculture Technology AAS program.</i></p> <p><i>Courses required for the Aquaculture Technology Diploma are designated with *</i></p>	35-37 SHC	23-25 SHC	

C. Other Major Hours. To be selected from the following prefixes:

ACC, AGR, AQU, ART, BIO, BTC, BUS, CHM, CIS, CSC, ECO, EGR, ETR FWL, GIS, HOR, MAT, MKT, PHY, TRF, SRV, and WBL. *Up to two semester hour credits may be selected from ACA. 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.

An **Employability Skills Resource Toolkit has been developed by NC-NET for the competencies listed above.*

Additional information is located at: <http://www.nc-net.info/employability.php>

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

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

CURRICULUM STANDARD REVISION
Guilford Technical Community College

Aviation Electronics (Avionics) Technology (A60150)

Request: The State Board of Community Colleges is asked to approve Guilford Technical Community College's request to revise the Aviation Electronics (Avionics) Technology (A60150) curriculum standard with an effective term of Fall 2016.

Proposed Revisions:

- Remove the following course from the core:
AVI 110 Aviation Maintenance – General
- Add the following course to the core:
AET 110 Avionics – General
- Revise the curriculum description to reflect the change in emphasis from aviation maintenance to avionics.

**AET 110 Avionics – General is a new course approved by the Curriculum Review Committee at their February 25, 2016 meeting.*

Rationale: Industry feedback regarding student graduate effectiveness has revealed it would be beneficial to provide additional training in aviation electronics. *AET 110 Avionics-General* has replaced *AVI 110 Aviation Maintenance – General* as a prerequisite introductory course to avionics technology (AET) courses, thereby requiring a corresponding revision to occur within the curriculum standard. The suggested revision is designed to provide students with an extensive overview of major aircraft systems, which are by their nature inherently interrelated, to help students successfully integrate additional avionics competencies into a comprehensive skillset.

Vote Results:

Guilford Technical Community College is the only college approved to offer Aviation Electronics (Avionics) Technology (A60150).

Contact:

Mr. Frank Scuiletti
Coordinator

PROPOSED CURRICULUM STANDARD

Effective Term
 Fall 2011 2016
~~{2011*03}~~
 [2016*03]

Curriculum Program Title	Aviation Electronics (Avionics) Technology	Program Code	A60150
Concentration	(not applicable)	CIP Code	47.0609

Curriculum Description

This curriculum provides individuals with the basic knowledge and skills required to enter the avionics career field as a technician and prepares students for the current avionics licensing agency examination.

Course work includes general ~~aviation maintenance~~ **avionics**, sheet metal, airframe systems, electrical and electronic systems, practical wiring, navigation equipment, flight management and flight control systems, flight line testing and troubleshooting, and Federal Aviation Administration (FAA) regulations.

Graduates should be prepared for the current avionics licensing agency examination and for entry-level employment as an avionics technician in an avionics repair station, an airfield fixed base operator's avionics facility, or an independent repair facility.

Curriculum Requirements*

[for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.97 (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-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. (See second page for additional information.)
- III. Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

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

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

PROPOSED

Major Hours

[ref. 1D SBCCC 400.97 (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-based 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.

Aviation Electronics (Avionics) Technology (A60150)

	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE	39 SHC		
Required Courses: AVI 110 Aviation Maintenance General 15 SHC AET 110 Avionics-General 15 SHC AET 120 Sheet Mtl Acft Structures 2 SHC AET 122 Airframe Electrical 4 SHC AET 126 Electronics/Instruments 2 SHC AET 210 Practical Wiring/Factors 2 SHC AET 212 Aviation Comm Systems 2 SHC AET 214 Avia Navigation Systems 2 SHC AET 220 Flight Management 2 SHC AET 222 Avia System Interconnect 2 SHC AET 224 Adv Wire/Troubleshooting 4 SHC AET 226 Flight Line Testing 2 SHC			
B. CONCENTRATION (Not applicable)			
C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> AET, AVI, CIS, CSC, and WBL <i>Up to two semester hour credits may be selected from ACA.</i> <i>Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS and SPA.</i>			