

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM Dr. R. Scott Ralls, President

April 22, 2010

MEMORANDUM

TO: Presidents

Chief Academic Officers

FROM: Sharon E. Morrissey, Ed. D.

Senior Vice President and Chief Academic Officer

SUBJECT: State Board Action on April 16, 2010

On April 16, 2010, the State Board of Community Colleges approved revisions to the following curriculum standards:

Autobody Repair (Diploma) (D60100) – Title/Code revised to Collision Repair and Refinishing Technology (A60130)

Cyber Crime Technology (A55210)

Nuclear Maintenance Technology (A50390) – Title/Code revised to Nuclear Technology (A50460)

Please be aware that you must implement the standard revision changes no later than one year after the effective term. You must update your college's electronic program of study and receive approval from the System Office prior to implementation of the revised program.

The revised curriculum standards are attached for your convenience. You may view all curriculum standards by visiting the Programs website at:

http://www.nccommunitycolleges.edu/Programs/curriculum standards.htm

If you have any questions concerning the State Board action items, please contact Dr. Judith C. Mann at 919-807-7108 or manni@nccommunitycolleges.edu.

JCM/JF/swj Attachments

c: Dr. Judith C. Mann Dr. John Pettitt Ms. Jennifer Frazelle Program Coordinators

> CC10-016 Email

CURRICULUM STANDARD

Effective Term Fall 2010 [2010*03]

Curriculum Program Title	Nuclear Technology	Code	A50460
Concentration	(not applicable)	-	

Curriculum Description

The Nuclear Technology curriculum prepares individuals to become qualified reactor field service technicians who conduct inspections and implement repairs and modifications to licensed nuclear facilities which have light water reactors that are shut down for refueling.

Course work includes theory and application related to industrial and engineering technology disciplines including nuclear reactor theory, boiling water reactor systems, quality control, industrial and nuclear safety, instrumentation, electrical generation, automation and robotics, welding, and various metallurgical inspection procedures.

Upon completion, graduates should qualify as entry-level nuclear reactor service technicians and have academic preparations to advance into other industrial or engineering technician positions within the commercial nuclear power 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.

				AAS	Diploma	Certificate
Minimum Major Hours Required		49 SHC	30 SHC	12 SHC		
Α.	CORE			48 SHC	12 SHC	
	A diploma offered under this AAS	degree requires a mini	mum of			
	12 SHC extracted from the require	ed subject/course core	of the AAS degree.			
Requ	uired Courses:					
	ATR 112 Intro to Automati	ion	3 SHC			
	CIS 110 Introduction to C	Computers	3 SHC			
	CIS 115 Intro to Prog & I	Logic	3 SHC			
	HYD 110 Hydraulics/Pneur	matics I	3 SHC			
	ELC 213 Instrumentation		4 SHC			
	ISC 112 Industrial Safety		2 SHC			
	ISC 130 Intro to Quality (Control	3 SHC			
	MAT 122 Algebra/Trigonor		3 SHC			
	NUC 110 Nuclear Reactor		3 SHC			
	NUC 120 Nuclear Reactor		4 SHC			
	NUC 130 Applied NDE-Nu	•	2 SHC			
	PHY 131 Physics– Mechan		4 SHC			
	PHY 132 Physics– Elec an		4 SHC			
	WLD 112 Basic Welding Pr		2 SHC			
	WLD 143 Welding Metallu		2 SHC			
	WLD 262 Inspection and Te		3 SHC			
Rea	uired Subject Areas:					
•	None					
В.	CONCENTRATION (Not	applicable)				
C.	OTHER MAJOR HOURS	3				
c.	To be selected from the following prefixes:					
	ATR, CIS, COE, ELC, HYD, and WLD					
	Foreign language courses (incapproved other major hours m					

CURRICULUM STANDARD

Effective Term Fall 2010 [2010*03]

Curriculum Program Title Cyber Crime Technology Code A55210

Concentration (not applicable)

Curriculum Description

This curriculum will prepare students to enter the field of computer crime investigations and private security. Students completing this curriculum will be capable of investigating computer crimes, properly seize and recover computer evidence and aid in the prosecution of cyber criminals.

Course work in this curriculum will include a division of work in the disciplines of criminal justice and computer information systems. Additionally, students will be required to take specific cyber crime classes.

Graduates should qualify to become computer crime investigators for local or state criminal justice agencies. Also these graduates should be competent to serve as computer security specialists or consultants with private business.

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.

Cyber Crime Technology A55210 **AAS** Diploma Certificate Minimum Major Hours Required **49 SHC** 30 SHC 12 SHC **16 SHC CORE** NR Α. **Required Courses:** CCT 110 Introduction to Cyber Crime 3 SHC CCT 112 Ethics & High Technology 3 SHC CCT 121 Computer Crimes Investigation 4 SHC CCT 231 Technology Crimes & Law 3 SHC CCT 289 Capstone Project 3 SHC **Required Subject Areas:** None **CONCENTRATION** (Not applicable) В. C. OTHER MAJOR HOURS *To be selected from the following prefixes:* ACC, ASL, BIO, BUS, CCT, CIS, CJC, COE, COM, CSC, CTS, DBA, ECO, EDU, HEA, HIS, NET, NOS, OST, PED, POL, PSY, SEC, SOC, and SPA Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.

CURRICULUM STANDARD

Effective Term Fall 2010 [2010*03]

Curriculum Program Title

Collision Repair and Refinishing Technology

Code

A60130

Concentration

(not applicable)

Curriculum Description

The Collision Repair and Refinishing Technology curriculum prepares individuals to become qualified technicians who possess the diverse skills required to perform quality repairs and proper refinishing techniques on automobile bodies and to diagnose and repair mechanical and electrical systems.

Coursework includes classroom and laboratory experiences that integrate technical application with academic theory. Emphasis is placed on autobody fundamentals, painting and refinishing, structural and non-structural damage repair, mechanical and electrical component repair or replacement, and common industry practices.

Graduates should be qualified to take National Institute for Automotive Service Excellence (ASE) certification examinations and also for entry-level employment in automotive dealerships, independent repair shops, or through self-employment, as collision repair and refinishing technicians.

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 in Program	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.

Collision Repair and Refinishing Technology A60130						
				AAS	Diploma	Certificate
Minimum Major Hours Required			49 SHC	30 SHC	12 SHC	
Α.	CORE			40-43 SHC	31 SHC	
Cor	urses required	for the Diploma are designated with an	*			
Rea	uired Cour	ses:				
*	AUB 111		4 SHC			
*	AUB 112	2	4 SHC			
*	AUB 114		2 SHC			
*	AUB 121		3 SHC			
*	AUB 122	Non-Structural Damage II	4 SHC			
*	AUB 131	Structural Damage I	4 SHC			
*	AUB 132	Structural Damage II	4 SHC			
*	AUB 134	Autobody MIG Welding	3 SHC			
*	AUB 136	Plastics and Adhesives	3 SHC			
Reg	uired Subje	ect Areas:				
•		Mech & Elec Components I	3 SHC			
	AUB 142	-	6 SHC			
	or	•				
	Select 9-12	2 SHC:				
	AUT 141	Suspension & Steering Sys	3 SHC			
	AUT 151	Brake Systems	3 SHC			
	AUT 161	Basic Auto Electricity	5 SHC			
	AUT 171	Auto Climate Control	4 SHC			
В.	CONCE	NTRATION (Not applicable)				
C.	OTHER	MAJOR HOURS				
		ed from the following prefixes:				
	ARS, AUI	3, AUC, AUT, BUS, CIS, COE, C				
Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.						