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

March 19, 2012

MEMORANDUM

TO: Presidents
               Chief Academic Officers

FROM: Sharon E. Morrissey
               Senior Vice President and Chief Academic Officer

SUBJECT: State Board Action on March 16, 2012
               Curriculum Standard Revision

On March 16, 2012, the State Board of Community Colleges approved the requested revisions to the following curriculum standard:

Computer Technology Integration (A25500)

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

If you have any questions concerning the State Board action item, please contact Ms. Jennifer Frazelle at 919.807.7120 or frazellej@nccommunitycolleges.edu. The revised standard is attached for your convenience. You may view all curriculum standards and courses by visiting the Programs website at:

http://www.nccommunitycolleges.edu/Programs/index.html

SEM/JF/gr
Attachment
c: Mr. Van Wilson
     Ms. Elizabeth Self
     Ms. Jennifer Frazelle
     Program Coordinators

CC12-006
Email

Curriculum Program Title   **Computer Technology Integration**   Code   A25500

Concentration

Curriculum Description

The Computer Technology Integration (CTI) curriculum prepares graduates for employment as designers, testers, support technicians, administrators, developers, or programmers with organizations that use computers to design, process, manage, and communicate information, depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to communicate and solve technical issues related to information support and services, interactive media, network systems, programming and software development, and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

*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.

Computer Technology Integration A25500	AAS	Diploma	Certificate
Minimum Major Hours Required	**49 SHC**	**30 SHC**	**12 SHC**

A.   **CORE**
 Courses required for the diploma are designated with *. Additional hours to meet the required number of hours for the diploma should be extracted from courses with core prefixes.
 Required Courses:
 	
     CTS 115   Info Sys Business Concept   3 SHC
 *   CTI 110   Web, Pgm, & DB Foundation   3 SHC
 *   CTI 120   Network & Sec Foundation   3 SHC
 	
 Select one set:
     CTI 130   OS and Device Foundation   6 SHC
          or
     NOS 110   Operating System Concepts   3 SHC
          and
     CTS 120   Hardware/Software Support   3 SHC
          or
     CET 111   Computer Upgrade/Repair I   3 SHC
          and
     CET 211   Computer Upgrade/Repair II   3 SHC
          or
     CTS 120   Hardware/Software Support   3 SHC
          and
     CTS 220   Adv Hard/Software Support   3 SHC
 	
 Required Subject Areas:
 Select one course from one of the five (5) subject areas and an additional (9) credit hours from prefixes within the same subject area selected:
 	
 Information Support and Services
     CIS 110   Introduction to Computers   3 SHC
     CIS 111   Basic PC Literacy   2 SHC
     OST 122   Office Computations   2 SHC
	26-27 SHC	**17-18 SHC**	

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Computer Technology Integration A25500 (Continued)			
Interactive Media 　　　DEA 111　Introduction to DEAT　　　　　　　3 SHC 　　　DME 110　Intro to Digital Media　　　　　　　3 SHC 　　　GRD 110　Typography I　　　　　　　　　　　3 SHC 　　　SGD 111　Introduction to SGD　　　　　　　3 SHC 　　　WEB 110　Internet/Web Fundamentals　　　　3 SHC **Network Systems** 　　　NET 110　Networking Concepts　　　　　　　3 SHC 　　　NET 125　Networking Basics　　　　　　　　3 SHC 　　　NOS 110　Operation Systems Concepts　　　3 SHC 　　　TNE 111　Campus Networks I　　　　　　　　3 SHC **Programming and Software Development** 　　　CIS　　115 Intro to Prog & Logic　　　　　　3 SHC 　　　CSC　　133 C Programming　　　　　　　　3 SHC 　　　CSC　　134 C+ + Programming　　　　　　3 SHC 　　　CSC　　135 COBOL Programming　　　　　3 SHC 　　　CSC　　139 Visual BASIC Prog　　　　　　3 SHC 　　　CSC　　141 Visual C+ + Prog　　　　　　　3 SHC 　　　CSC　　142 Visual COBOL Prog　　　　　　3 SHC 　　　CSC　　151 JAVA Programming　　　　　　3 SHC 　　　CSC　　153 C# Programming　　　　　　　3 SHC 　　　DBA　　110 Database Concepts　　　　　　3 SHC **Emerging Information Technology:** 　　　CCT 110 Intro to Cyber Crime　　　　　　　3 SHC 　　　EGR 115 Intro to Technology　　　　　　　3 SHC 　　　HBI 110 Issues and Trends in HBI　　　　3 SHC 　　GIS 111 Introduction to GIS　　　　　　　3 SHC 　　　HPC 110 Intro to HPC　　　　　　　　　　3 SHC 　　　SEC 110 Security Concepts　　　　　　　3 SHC			
B.　CONCENTRATION			
C.　OTHER MAJOR HOURS 　　*To be selected from the following prefixes:* 　　ACC, BUS, CCT, CET, CIS, CJC, COE, CSC, CTI, CTS, DBA, DEA, 　　DES, DME, ECM, ECO, EGR, ELN, GIS, GRA, GRD, HBI, HIT, HPC, 　　ISC, MIT, MKT, NET, NOS, OMT, OST, SEC, SGD, SGR, TNE and 　　WEB 　　*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.*			