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# Code Green Super Curriculum Improvement Project

As our state's economy evolves, the North Carolina Community College System is responding to industry changes. In January 2010, the North Carolina Association of Community College Presidents' requested a Curriculum Improvement Project (CIP) to rejuvenate existing curriculum programs and integrate energy efficiency skills into all aspects of our technical education pathways. As the largest CIP in our system's history, the project addressed five areas that are critical to the growth of North Carolina's new energy economy: **building, energy, environment, transportation and engineering technology** and was referred to as the Code Green Super CIP.

The Code Green Super CIP is unique in that it was the first total revamping of entire sectors of our technical education curriculum. The breadth and impact of the CIP was immense – affecting more than 80 curriculums and thousands of students. But the project extends much further, leaving a permanent impact on our colleges' capabilities to support job growth, industry improvements and increased access to education.

The following outcomes have been realized from the Code Green Super CIP:

- 1. Streamlined program structures that reduce the number of curriculum titles:
  - To minimize redundancies, the CIP consolidated **77 curriculum standards** into only **32 standards**.
  - This reduction standardized curriculum models, allowing similar program majors to be grouped together under curriculum programs that share a common academic and technical core. These core courses give students a foundation of general skills, allowing them more opportunity to branch into specific program majors in order to explore careers and job opportunities.
  - Below is an example of a Curriculum Standard for the Architecture & Construction Technology pathway:
    - Students will take general education academic courses that emphasize workforce development (i.e. a writing course rather than a literature course). Students will also take courses within their technical education core before entering a specific field-related program major of their choice.



Within each program, a student is offered a choice of classes within the general education core, the technical education core and the specific program major. The required semester hours of credit (SHC) vary based on the student's desired degree program. Below is an example of a course load for a student seeking an AAS degree in Architectural Technology

## from the Architecture & Construction Technology Curriculum:



## 2. Curriculum competencies that allow for non-credit certified students to transition into credit programs:

- The CIP developed competency-based courses to facilitate the awarding of academic credit for equivalent course work taken on a non-credit basis.
  - Students who demonstrate mastery of competencies in non-credit courses should not have to repeat that course work if they decide to pursue an academic degree. The new competencybased CIP curriculum facilitates the awarding of academic credit when the college documents that the non-credit course work is equivalent to a credit experience.

#### 3. Students with industry-recognized credentials:

- Recognizing the important role employers play in defining workplace competencies, the CIP revised curriculum courses and programs to include skill sets like those endorsed by the National Association of Manufacturers (NAM). Students can now earn multiple, nationally recognized industry credentials while working toward an associate degree in a related field of study.
  - With credentials under their belts, students will emerge with skill levels that are more adaptable, technology-savvy and recognized by industries. An educated workforce will have a critical, direct impact on North Carolina industries, allowing for each to become more competitive, innovative and marketable.
  - Recognizing the potential of a skilled, educated workforce, more industries will look to grow their businesses in North Carolina.

## 4. Revised programs that integrate employability competencies, energy efficient skills and learning outcomes:

- The CIP created 47 new courses and revised 219 additional courses. Student Learning Outcomes were added to all the technical education core courses. Each course was scrutinized with current and emerging energy efficiency skills in mind and, where appropriate, these skills were incorporated into course objectives.
- The revised programs and courses include Employability Competencies that are identified by the Department of Labor Career Competencies Model and reflect the input of business and industry. To access the competency model, visit the Competency Model Clearinghouse: <u>http://www.careeronestop.org/competencymodel/</u>.

## 5. Engaged faculty who are trained in energy efficient and green technologies:

The second half of the CIP focused on training system instructors how to better prepare students for a rapidly changing green job market. The CIP conducted **46 professional development events** with more than **683 faculty participants**, allowing instructors to gain a better understanding of topics related to energy efficiency that will affect students in job industries, such as bioenergy and alternative fuels.

The State Board of Community Colleges approved all recommended Code Green Super CIP curriculum revisions on August 17, 2012. Colleges have one year to implement the changes.

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