MEMORANDUM

Revised

TO: Presidents
   Chief Academic Officers

FROM: Wesley E. Beddard, Associate Vice President
       Programs

SUBJECT: State Board Action on September 16, 2016
         Academic Programs

September 19, 2016

On September 16, 2016, the State Board of Community Colleges approved a modification to the special (abbreviated) program application process which eliminates the need for the impact assessment for programs which do not have a clinical component. Please note that the elimination of the impact assessment is only for the program titles that have been approved for the special application process. The revised Section 3A (Special Application) of the Curriculum Procedures Manual, with a list of these program titles, is attached. The revised areas have been highlighted for your attention.

In addition, the attached, revised Career and College Promise section of the Curriculum Procedures Procedure Manual was shared with the State Board of Community Colleges. The revision reflects the addition of the Pre-ACT college readiness benchmark to Attachment A which is the replacement for the PLAN assessment which is being phased out. The PLAN benchmark will remain listed on Attachment A for informational purposes.

The State Board was presented with the following, attached, revised curriculum standards which reflect the elimination of optional core courses which were archived by the Curriculum Review Committee in May:

<table>
<thead>
<tr>
<th>Curriculum Standard Title/Code</th>
<th>Archived Course(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Engineering Technology (A40130)</td>
<td>ISC 129, PCI 150</td>
</tr>
<tr>
<td>Geospatial Mapping Technology (A40110)</td>
<td>GIS 161</td>
</tr>
<tr>
<td>Health Care Technology (Certificate)(C45350)</td>
<td>HCT 103</td>
</tr>
<tr>
<td>Industrial Systems Technology (A50240)</td>
<td>ALT 130A, ALT 131A</td>
</tr>
<tr>
<td>Licensed Practical Nurse Refresher (Certificate)(C45390)</td>
<td>NUR 105, 106, 117</td>
</tr>
<tr>
<td>Medical Laboratory Technology</td>
<td>MLT 256, 258, 282, 268, 284, 278, 279, 286, 287</td>
</tr>
</tbody>
</table>
In additional action, the State Board of Community Colleges approved the requested revision (addition of *ACC 115 College Accounting*) to the following attached curriculum standard:

**Hospitality Management (A25110)**

Please be aware that you must implement the revised curriculum standards 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. You may view all curriculum standards and courses by visiting the Academic Programs website at:

[http://www.nccommunitycolleges.edu/academic-programs](http://www.nccommunitycolleges.edu/academic-programs)

If you have any questions concerning the September State Board action item listed above, please contact Ms. Jennifer Frazelle at 919.807.7120 or [frazellej@nccommunitycolleges.edu](mailto:frazellej@nccommunitycolleges.edu).

WB/JF/gr
Attachment
c: Dr. Lisa M. Chapman
   Ms. Elizabeth Self
   Ms. Jennifer Frazelle
   Program Coordinators

CC16-038
Email
Section 3A

Special Curriculum Program Application for Selected Curriculum Titles (Procedures and Accountability Report)

(Associate in Applied Science, Diploma, and Certificate Selected Curriculum Programs)

Implementation October 1, 2012
North Carolina Community College System
Special Curriculum Program Application Procedures and Accountability Report for Selected Curriculum Titles

The State Board of Community Colleges is authorized to approve curriculum programs (1D SBCCC 400.95). The State Board has delegated to the President of the North Carolina Community College System the authority to approve new curriculum programs utilizing the special application process for the selected titles. Curriculum programs recommended to the State Board for placement on the Special Curriculum Application process list by a college or by System Office staff must meet the following criteria to be eligible:

1. There is a widespread, immediate need for the job training and there will be minimal impact on college programs if multiple colleges offer the program; or
2. The program is a concentration (applying college must be approved to offer the parent program.)

The following curriculums have been approved by the State Board of Community Colleges for the Special Application process:

- Community Spanish Interpreter (A55370)
- Entrepreneurship (A25490)
- Supply Chain Management (A25620)
- Industrial Systems Technology (A50240)
- Infant/Toddler Care (Certificate)(C55290)
- Information Technology (A25590)
- Lateral Entry (Certificate)(C55430)
- Medical Office Administration (A25310)
- School-Age Care (Certificate)(C55450)
- Sustainability Technologies (A40370)
- Welding Technology (A50420)

The following curriculums have been approved by the State Board of Community Colleges for the Special Application process, but require that the college have prior approval for the Cosmetology (A55140) program:

- Cosmetology Instructor (Certificate)(C55160)
- Esthetics Instructor (Certificate)(C55270)
- Esthetics Technology (Certificate)(C55230)
- Manicuring Instructor (Certificate)(C55380)
- Manicuring/Nail Tech. (Certificate)(C55400)

The following curriculums have been approved by the State Board of Community College for the Special Application process, but requires that the college have prior approval for the Early Childhood Education (A55220) program: (Pending State Board approval)

- Early Childhood Administration (Certificate)(C55xxx)
- Early Childhood Preschool (Certificate)(C55xxx)

The following curriculum has been approved by the State Board of Community Colleges for the Special Application process, but requires that the college have prior approval for the Real Estate (A25400) program:

- Real Estate Licensing (Certificate) (C25480)

The following curriculum has been approved by the State Board of Community Colleges for the Special Application process, but requires that the college have prior approval for the Culinary Arts (A55150) program:

- Foodservice Technology (Diploma) (D55250)

All concentrations have been approved by the State Board of Community Colleges for the Special Application process, but require that the college have prior approval for the parent program. See Section 7 of the Curriculum Procedures Reference Manual for a list of concentration/parent programs.
Submission of Special Program Application:
Colleges seeking curriculum program approval process, through the special application process, should submit an application using the attached procedures. The following items must be completed and documented as indicated before the program can be considered for approval by the State Board:

1) Local Certification
2) Proposed Program of Study
3) Impact Assessment Form(s) from colleges in counties contiguous to applying college’s service area approved to offer the same or similar program;
4) Impact Assessment Form(s) from colleges approved to offer the same or similar health science program which has a clinical component and
5) Three Year Accountability Report (must be submitted three years after program implementation)

Two (2) copies of the application with original signatures on each copy should be submitted to:

Lisa M. Chapman, Ed.D.
Senior Vice President for Programs
Academic and Student Services
North Carolina Community College System Office
5016 Mail Service Center
Raleigh, NC 27699-5016

Deadlines:
Special program applications may be submitted at any time. Please allow approximately three weeks for System Office review and approval. Colleges will be notified of program approval and will be instructed to submit an electronic program of study. Approval of the program and the program of study must be complete prior to implementation of the program.
SPECIAL CURRICULUM PROGRAM APPLICATION PROCEDURES

Instructions for Completing Attached Application:
All items must be completed and documented as indicated before the program can be considered for approval by the System Office. Please note that colleges may only utilize the Special Curriculum Program Application process when applying for a concentration program if the applying college already has approval for the parent program or when applying for an approved special application program title. See page 2 for a list of approved titles.

I. Local Certification:
Complete the institutional certification form. A copy of the minutes from the Board of Trustees meeting(s) at which the proposed program was discussed and approved must be attached to the application.

II. Proposed Program of Study
The proposed program of study should be designed to be in compliance with the curriculum standard approved by the State Board of Community Colleges. The State Board approved curriculum standard for each program is located at:
http://www.nccommunitycolleges.edu/Programs/curriculum_standards.html.

The proposed program of study should also be designed using the appropriate courses from the Combined Course Library which is located at: http://www.nccommunitycolleges.edu/ccl.html.

III. Impact of the Proposed Program on Other Programs in the System

A. Impact Assessment Form
The applying college must send completed hard copies of the Impact Assessment Form to any college that is approved to offer the same or similar program and which is contiguous to the counties in the applying college’s service area. The Impact Assessment Forms must document the perceived impact of implementing the proposed program on the existing program(s) at the contiguous colleges.

If the proposed program includes a clinical requirement, send the Impact Assessment Form to all NCCCS colleges approved to offer the same or similar programs. The Impact Assessment Form should document the perceived impact of the proposed program on existing program(s) at other colleges, including the impact on clinical sites used by other colleges.

An impact assessment is not required for programs which do not include a clinical requirement.

B. Documenting Impact Assessment
If applicable, include in the application a list of colleges who received an Impact Assessment Form, due to the clinical requirement of the proposed program, and a narrative summary of the responses received. If the applying college does not receive a response from a college, please attempt to contact that college’s president to obtain a response. Attach copies of signed Impact Assessment Forms from all responding college(s).
If the applying college receives a negative response as a result of the original Notification or the Impact Assessment Form, provide a narrative summary of the actions the college took to resolve the negative responses and the outcome of those actions. Document the outcome of a resolution meeting using the Impact Assessment Resolution Form.

C. Impact Assessment Conflict Resolution Appeals Process
If the college presidents cannot reach agreement on the impact of the proposed program, the Senior Vice President and Chief Academic Officer will refer the issue to the System President. If a meeting with the System President does not resolve the issues, the presidents may request a hearing before the Program Committee of the State Board. The Program Committee will make a recommendation to the State Board on the disposition of the proposed program. The State Board’s decision regarding resolution of the matter is final.

IV. Three Year Accountability Report

A Three Year Accountability Report must be submitted by the college three years after program implementation. The report must include information on enrollment, completers, employment, licensure/accreditation and other pertinent information.

The Three Year Accountability Report should be emailed to frazellej@nccommunitycolleges.edu.

If electronic signature is not available, a hard copy, with original signature, should be mailed (in addition to the emailed report) to:

Jennifer Frazelle, Director Academic Programs
North Carolina Community College System Office
5016 Mail Service Center
Raleigh, NC 27699-5016
SPECIAL CURRICULUM PROGRAM APPLICATION

College ________________________________________________________________

Program Title _________________________________________________________

Concentration Title ____________________________________________________

(If applicable)

Program Code __ __ __ __ __ __

Credential (Indicate the highest credential to be awarded)

_____ AAS      _____ Diploma      _____ Certificate

Proposed Semester and Year of Implementation

_____ Spring     _____ Summer     _____ Fall    20__ __

Contact Person (Name/Title): ____________________________________________

Phone (_____)________________________ Extension _______ E-mail __________

Does this application include the use of a Level III Instructional Service Agreement (ISA)?

_____ Yes    _____ No

(If yes, please be sure to include the ISA with your application.)
1. **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 (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.

(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

______________________________  ____________________________
Signature, Board of Trustees Chair  Date

---

State Board Revised 08/16/12. editorial revision 06/03/14. SBCC Revised 07/18/14; SBCC Revised 08/15/14; editorial revision 05/15/2015; editorial revision 09/28/15; editorial revision 12/04/15; editorial revision 06/07/16; SBCC revised 08/19/2016; SBCC revised 09/16/2016.
II. Proposed Program of Study: Complete the following to indicate the proposed program of study.

A. 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.

1. Communication:
   The following course(s) are required:
   
   **Course Number  Course Title (Credit)**
   ENG 111 Expository Writing (3) (Example format)

   Communication Pick List if applicable:
   Select a course(s) from the following:

2. Humanities/Fine Arts:
   The following course(s) are required:
   
   **Course Number  Course Title (Credit)**

   Humanities/Fine Arts Pick List if applicable:
   Select a course(s) from the following:

3. Social/Behavioral Sciences:
   The following course(s) are required:
   
   **Course Number  Course Title (Credit)**

   Social/Behavioral Pick List if applicable:
   Select a course(s) from the following:

4. Natural Sciences/Mathematics:
   The following course(s) are required:
   
   **Course Number  Course Title (Credit)**

   Natural Sciences/Mathematics Pick List if applicable:
   Select a course(s) from the following:

   **Total General Education Semester Hour Credits Required ________**
**Program of Study (Continued)**

**B. MAJOR HOURS**

1. **Core**
   
   The core is comprised of specific courses and/or subject areas which are required for each curriculum program. These are identified on the curriculum standard for each program.

   The following course(s) are required:
   
   **Course Number**  **Course Title**  **(Credit)**

   **Required Subject Area(s) if applicable:**

   
   

   **Total Core Semester Hour Credits**

2. **Concentration (if applicable)**
   
   If the proposed program is a concentration, please list the required courses and/or subject areas. Only utilize the courses and/or subject areas identified on the curriculum standard.

   The following course(s) are required:
   
   **Course Number**  **Course Title**  **(Credit)**

   **Required Subject Area(s) if applicable:**

   
   

   **Total Concentration Semester Hour Credits**
Program of Study (Continued)

3. 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 unique prefixes as noted on the standard.

The following course(s) are required:

Course Number  Course Title  (Credit)

Required Subject Area(s) if applicable:

Total Other Major  Semester Hour Credits ____

Total Major Semester Hour Credits ____

Please note:

Work experience 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.

Selected topics or seminar curriculum courses may be included in associate in applied science degree up to a maximum of 3 semester hours of credit; and in diploma or certificate programs up to a maximum of 3 semester hours of credit. Such curriculum courses shall be listed on a program of study as “other major” hours. Selected topics and seminar curriculum courses shall not be used more than once in a program.
Program of Study (Continued)

C. OTHER REQUIRED COURSES (If applicable)

A college may require other courses in order to meet graduation or local employer requirements. These requirements may be met through a maximum of 7 semester hours of credit in a degree program; 4 semester hours of credit in a diploma program, and 1 semester hour of credit in a certificate program. Restricted, unique or free elective courses may not be included as other required courses.

The following course(s) are required:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title (Credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Other Required Semester Hour Credits____

Total Semester Hours Credit in Program____

Course Substitution (if applicable)

<table>
<thead>
<tr>
<th>Course in Program</th>
<th>Substitute Course(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

State Board Revised 08/16/12. editorial revision 06/03/14. SBCC Revised 07/18/14; SBCC Revised 08/15/14; editorial revision 05/15/2015; editorial revision 09/28/15; editorial revision 12/04/15; editorial revision 06/07/16; SBCC revised 08/19/2016; SBCC revised 09/16/2016.
III. Impact of the Proposed Program on Other Programs in the System:

A. Impact Assessment Form: The applying college should complete the impact assessment form and sign. Send completed copies of the Impact Assessment Form to colleges which are approved to offer the same or similar program(s) and which are located in counties which are contiguous to counties in your college’s service area. The college with the same or similar program should complete and sign their response. Include copies of signed forms in your application. If the proposed program includes a clinical requirement, send the Impact Assessment Form to all NCCCS colleges approved to offer the same or similar programs. The Impact Assessment Form should document the perceived impact of the proposed program on existing program(s) at other colleges, including the impact on clinical sites used by other colleges.

Impact Assessment Form – Special Curriculum Program Application

_________________________ intends to apply for approval to offer __________________________.

Applying College  Program Title/Concentration Title/Code

The college has determined that __________________ is located in a contiguous county

Name of college with same or similar program

and is currently offering the same or similar program entitled and coded as __________________________.

Program Title/Concentration Title/Code

Our college's assessment of the impact on your program is identified below:

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

The following clinical site(s) may be utilized in offering this program (complete if applicable):

________________________________________________________________________________________

________________________________________________________________________________________

_________________________  ____________________

Signature of President of Applying College  Date

Please indicate your response to this assessment within two weeks of the date of this form. (Failure to respond within two weeks may be construed as concurrence with the impact assessment.)

_____ Yes, I agree with the impact assessment.

_____ No, I do not agree with the impact assessment, however, I am supportive of the college applying for the program.

_____ No, I do not agree with the impact assessment and I am not supportive of the college applying for the program.

_____ Explanation (attach additional comments on other pages):

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

_________________________  ____________________

Signature of President of College with Same or Similar Program  Date
B. Documenting Impact Assessment: Provide a list of colleges who received an Impact Assessment Form and a narrative of the responses received. *(Only required if proposed program contains a clinical component.)*

<table>
<thead>
<tr>
<th>Name of College(s) Receiving Impact Assessment Form</th>
<th>Program Title (Same or Similar)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Narrative of Responses Received: ________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________

If a negative response was received, provide a narrative summary of the actions taken to resolve the negative response and the outcome of those actions:
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
C. Impact Assessment Resolution: If a negative response was received, document the outcome of the resolution by completing the following Impact Resolution Form. Include copies of the signed resolution in the application.

Impact Assessment Resolution Form

Applying College  intends to apply for approval to offer  Program Title/Concentration Title/ Code.

College with Same or Similar Program  has identified that there will be an impact on its program. The identified impact is:

Applying College  has resolved the possible impact by:

Signature of President of Applying College  Date

Please indicate your response to this impact assessment resolution within two weeks of the date of this form. (Failure to respond within two weeks may be construed as concurrence with the impact assessment resolution.)

_____ Yes, I agree with the impact assessment resolution identified above.

_____ No, I do not agree with the impact assessment resolution identified above.

_____ Explanation (attach additional comments on other pages):

Signature of President of College with Same or Similar Program  Date

State Board Revised 08/16/12. editorial revision 06/03/14. SBCC Revised 07/18/14; SBCC Revised 08/15/14; editorial revision 05/15/2015; editorial revision 09/28/15; editorial revision 12/04/15; editorial revision 06/07/16; SBCC revised 08/19/2016; SBCC revised 09/16/2016.
IV. Three Year Accountability Report: The Three Year Accountability Report must be submitted three years after program implementation. Use the following template for the report.

Three Year Accountability Report

College: ________________________________________________________________

Title of Curriculum Program: _____________________________________________

Program Code: __________ Date of System Office President Approval:____________

Semester Program Started at College: Fall ___ Spring ___ Summer ___ 20___

Number of Students Enrolled in Program Annually Since Implementation:
(Please break down by certificate, diploma and AAS level)

<table>
<thead>
<tr>
<th></th>
<th>First Year Total</th>
<th>Second Year Total</th>
<th>Third Year Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Program Completers by Year:

<table>
<thead>
<tr>
<th></th>
<th>First Year Total</th>
<th>Second Year Total</th>
<th>Third Year Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Employment of Graduates in The Program:

- Number and Percentage of Graduates Employed in **Major or Related** Field
  Number of Students in First Graduating Class: ______  % employed ______
  Number of Students in Second Graduating Class:______ % employed ______

- Number and Percentage of Graduates Employed in **Other Fields**
  Number of Students in First Graduating Class: ______  % employed ______
  Number of Students in Second Graduating Class:______ % employed ______

- Number and Percentage of all graduates in the program continuing their education in the **same field**
  towards an advanced credential or degree:________
  This number represents the following percentage of all graduates: _____%
Are there external accrediting or licensing requirements for this program?

Yes ___  No ___  If yes, please provide:

Name of accrediting/licensing agency: ________________________________

Date of accreditation/approval: _________ 20___

or projected date of accreditation/approval: _________ 20___

Attach minutes of local advisory committee meetings since program implementation.

Program Outlook for Next Five Years:
(Brief Narrative: Please do not exceed space provided below.)

___________________________________________________

Signature of President of College

Date

Page 2 of 2

The Three Year Accountability Report should be emailed to frazellej@nccommunitycolleges.edu.

If electronic signature is not available, a hard copy, with original signature, should be mailed (in addition to the emailed report) to:

Jennifer Frazelle, Director Academic Programs
North Carolina Community College System Office
5016 Mail Service Center
Raleigh, NC 27699-5016

State Board Revised 08/16/12; editorial revision 06/03/14; SBCC Revised 07/18/14; SBCC Revised 08/15/14;
editorial revision 05/15/2015; editorial revision 09/28/15; editorial revision 12/04/15; editorial revision 06/07/16; SBCC revised
08/19/2016; SBCC revised 09/16/2016.
Section 14

Career and College Promise

Operating Procedures approved by State Board of Community Colleges on 10/12/11; SBCC revised 03/16/12; SBCC revised 07/19/13; SBCC revised 11/15/13; SBCC revised 03/21/14; SBCC revised 07/18/14; SBCC revised 10/30/15; SBCC revised 02/19/16; SBCC revised 04/15/16; SBCC revised 09/16/16.
Career and College Promise
Outline

I. Overview
II. Operating Procedures
III. Program of Study Filing Process
IV. Student Coding
V. Program Coding

Attachment A - College Readiness Benchmarks
Attachment B - College Transfer Pathway Standards
Section 14

Career and College Promise

I. Overview

Session Law 2011-145, the Appropriations Act of 2011, authorized the State Board of Education and the State Board of Community Colleges to establish the Career and College Promise program, effective January 1, 2012. The purpose of Career and College Promise is to offer structured opportunities for qualified high school students to dually enroll in community college courses that provide pathways that lead to a certificate, diploma, or degree as well as provide entry-level jobs skills.

Career and College Promise offers North Carolina high school students a clear path to success in college or in a career. The program is free to all students who maintain a “B” average and meet other eligibility requirements. Through a partnership of the Department of Public Instruction, the N.C. Community College System, the University of North Carolina system and many independent colleges and universities, North Carolina is helping eligible high school students to begin earning college credit at a community college campus at no cost to them or their families. The three pathways include:

1. College Transfer Pathways (CTP) requires the completion of at least 30 semester hours of transfer courses including English and mathematics.
2. Career and Technical Education Pathways (CTE) lead to a certificate or diploma aligned with a high school career cluster.
3. Cooperative Innovative High School Programs (CIHSP) are located on college campuses (unless a waiver was provided) and provide opportunities for students to complete an associate degree program or earn up to two years of college credit within five years. Examples include Early and Middle College High Schools.
<table>
<thead>
<tr>
<th>Career and College Promise - Pathways</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College Transfer Pathways</strong></td>
</tr>
<tr>
<td><strong>Definition</strong></td>
</tr>
</tbody>
</table>
| **Eligibility** | Be a high school Junior or Senior and:  
1. Have a weighted GPA of 3.0 on high school courses or have the recommendation of the high school principal or his/her designee (PLAN scores should be considered); and  
2. Have received career pathway information outlining program requirements for completion of the certificate or diploma. | Be a high school Freshman and:  
1. Passed Math I with a grade of C or better;  
2. Scored a 3, 4, or 5 on the EOC for Math I;  
3. Meet the college ready reading score of 16 on the 8th grade Explore test; (See page 14-11 for students without Explore and/or Math I scores)  
4. Have received career pathway information outlining program requirements for completion of the certificate or diploma.  
5. Have the recommendation of the high school principal. | High School students in grades 9 to 12 with access to an approved CIHS. Eligibility requirements for Cooperative Innovative High School programs are established jointly by local boards of trustees in accordance with G.S. 115C-238.50. Special emphasis and preference given to first-generation college students. |

1. Be a high school junior or senior;  
2. Have a weighted GPA of 3.0 on high school courses; and  
3. Demonstrate college readiness in English, reading and mathematics on an assessment or placement test or meet provisional status. (See Attachment A)
### Career and College Promise - Pathways

<table>
<thead>
<tr>
<th>College Transfer Pathways</th>
<th>Career Technical Education Pathways</th>
<th>Cooperative Innovative High School Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school principal or designee; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Enroll in Engineering, Industrial, Agriculture and Natural Resources, or Transportation Systems Technologies programs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be a high school Sophomore and:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. All criteria for freshmen as listed above, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Have a weighted GPA of 3.0 on high school courses.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Program of Study Requirements*</th>
</tr>
</thead>
<tbody>
<tr>
<td>32-41 SHC AA Pathway</td>
<td>Must be in compliance with pathway curriculum standards (See Attachment B).</td>
</tr>
<tr>
<td>35-43 SHC AS Pathway</td>
<td>Must have approval for the Associate in Arts to offer the CCP CTP leading to the Associate in Arts.</td>
</tr>
<tr>
<td>34-50 SHC AE Pathway</td>
<td>Must have approval for the Associate in Science to offer the CCP CTP leading to the Associate in Science.</td>
</tr>
<tr>
<td></td>
<td>Must have approval for the Associate in Engineering to offer the CCP CTP leading to the Associate in Engineering.</td>
</tr>
<tr>
<td></td>
<td>Must have System Office approval prior to implementation.</td>
</tr>
<tr>
<td>12 – 18 SHC Certificate</td>
<td>Must be in compliance with current curriculum standard; Must contain a either a minimum of 12 SHC derived from core of curriculum standard or consist of courses in a local traditional certificate as listed in the college's catalog.</td>
</tr>
<tr>
<td>36 – 48 SHC Diploma</td>
<td>Must be approved to offer the traditional program. No course pick lists in any CTE program of study (including local certificates submitted as CTE programs of study).</td>
</tr>
<tr>
<td></td>
<td>Must have System Office approval prior to implementation. Local certificates submitted as CTE programs of study must include a statement that verifies the courses are listed in the college's catalog for a traditional certificate (See p. 14-13).</td>
</tr>
<tr>
<td>64 – 76 SHC AAS degrees</td>
<td>CIHSP requirements are established jointly by local boards of education and local boards of trustees in accordance with G.S. 115C-238.50.</td>
</tr>
<tr>
<td>60 - 61 SHC AA/AS/AE</td>
<td></td>
</tr>
<tr>
<td>60 - 65 SHC AFA degrees</td>
<td></td>
</tr>
<tr>
<td>Maintaining Eligibility</td>
<td>College Transfer Pathways</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td>1. Continue to make progress toward high school graduation, and</td>
</tr>
<tr>
<td></td>
<td>2. Maintain a 2.0 GPA in college coursework after completing two courses.</td>
</tr>
<tr>
<td></td>
<td>3. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college’s policy for satisfactory academic progress.</td>
</tr>
<tr>
<td>Graduation**</td>
<td>1. A student may complete the AA/AS/AE pathway and then continue towards completion of the AA/AS/AE.</td>
</tr>
<tr>
<td></td>
<td>2. The AA/AS/AE may not be awarded prior to high school graduation verification.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Colleges must adhere to the program of study requirements listed in Section III beginning on page 14-14.

** High school students participating in Career & College Promise may not delay high school graduation in order to continue participation in the CCP program.
II. Operating Procedures

Session Law 2011-145, the Appropriations Act of 2011, authorized the State Board of Education and the State Board of Community Colleges to establish the Career and College Promise program, effective January 1, 2012.

Career and College Promise provides seamless dual enrollment educational opportunities for eligible North Carolina high school students in order to accelerate completion of college certificates, diplomas, and associate degrees that lead to college transfer or provide entry-level job skills. North Carolina community colleges may offer the following Career and College Promise pathways aligned with the K-12 curriculum and career and college ready standards adopted by the State Board of Education:

1. College Transfer Pathway leading to a minimum of 30 hours of college transfer credit;
2. A Career and Technical Education Pathway leading to a certificate, diploma or degree;

**College Transfer Pathway**

1. The Career and College Promise Pathway requires the completion of at least thirty semester hours of transfer courses, including English and mathematics and ACA 122 College Transfer Success
2. To be eligible for enrollment, a high school student must meet the following criteria:
   a. Be a high school junior or senior;
   b. Have a weighted GPA of 3.0 on high school courses; and
   c. Demonstrate college readiness on an assessment or placement test (See attachment A).

   A student must demonstrate college readiness in English, reading and mathematics to be eligible for enrollment in a College Transfer Pathway.
3. A high school junior or senior who does not demonstrate college-readiness on an approved assessment or placement test may be provisionally enrolled in a College Transfer Pathway. To qualify for Provisional Status, a student must meet the following criteria:
   a. Have a cumulative weighted GPA of 3.5;
   b. Have completed two years of high school English with a grade of ‘C’ or higher;
   c. Have completed high school Algebra II or Math III (or a higher level math class) with a grade of ‘C’ of higher;
   d. Obtain the written approval of the high school principal or his/her designee; and,
   e. Obtain the written approval of the community college president or his/her designee.
Students who meet all the requirements listed above may:

a. enroll in English and/or mathematics courses in a college transfer pathway as provisional students without placement or other testing.

b. provisional students who successfully complete ENG 111 with a ‘C’ or higher can enroll in ENG 112.

c. provisional students in the Associate in Science pathway who successfully complete MAT 171 with a “C” or higher can enroll in MAT 172.

d. register only for college mathematics (MAT) and college English (ENG) courses within the chosen Pathway.

e. Provisional students cannot enroll in any additional courses in the pathway until they are no longer considered provisional.

f. In order to no longer be considered provisional, the student must successfully complete the first mathematics and English course in the pathway with a grade of ‘C’ or higher.

4. To maintain eligibility for continued enrollment, a student must

a. Continue to make progress toward high school graduation, and

b. Maintain a 2.0 GPA in college coursework after completing two courses.

c. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college’s policy for satisfactory academic progress.

5. A student must enroll in one College Transfer Pathway program of study and may not substitute courses in one program for courses in another.

6. A student may change his or her program of study major with approval of the high school principal or his/her designee and the college’s chief student development administrator.

7. With approval of the high school principal or his/her designee and the college’s chief student development administrator, a student who completes a College Transfer Pathway, while still enrolled in high school, may continue to earn college transfer credits leading to the completion of the Associate in Arts, Science or Engineering. The AA/AS/AE may not be awarded prior to high school graduation verification.

8. With approval of the high school principal or his/her designee and the college’s chief student development administrator, a student may enroll in both a College Transfer Pathway program of study and a Career Technical Education program of study.
Career and College Promise Career Technical Education Pathway (Juniors and Seniors)

1. The Career and College Promise Career Technical Education Pathway for juniors and seniors leads to a certificate or diploma aligned with a high school Career Cluster.

2. To be eligible for enrollment, a high school student must meet the following criteria:
   a. Be a high school junior or senior;
   b. Have a weighted GPA of 3.0 on high school courses or have the recommendation of the high school principal or his/her designee; and
   c. Have received career pathway information outlining program requirements for completion of the certificate or diploma.

3. High school counselors should consider students’ PLAN scores in making pathway recommendations.

4. College Career Technical Education courses may be used to provide partial or full fulfillment of a four-unit career cluster. Where possible, students should be granted articulated credit based on the local or state North Carolina High School to Community College articulation agreement.

5. To maintain eligibility for continued enrollment, a student must
   a. Continue to make progress toward high school graduation, and maintain a 2.0 in college coursework after completing two courses. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college’s policy for satisfactory academic progress.

6. A student may be awarded a certificate or diploma prior to high school graduation. The AAS may not be awarded prior to high school graduation verification.

7. A student must enroll in one program of study and may not substitute courses in one program for courses in another. The student may change his or her program of study major with approval of the high school principal or his/her designee and the college’s chief student development administrator.

8. A student may concurrently enroll in two CTE programs of study provided the exception has been approved by the college’s Chief Academic Officer or his/her designee. With approval of the high school principal or his/her designee and the college’s chief student development administrator, a student may enroll in both a College Transfer Pathway program of study and a Career Technical Education program of study.

9. A CTE student is not required to demonstrate college readiness on an assessment or placement test to be eligible for the program. However, some required courses within the program may have developmental course pre-requisites requirements which must be met when this is the case through the demonstration of college readiness on an approved assessment or placement test (See Attachment A). Students are encouraged to complete college readiness assessments prior to entry to the program. CCP students may not enroll in developmental courses.
10. A student who completes the CTE certificate or diploma may continue in the same AAS as long as they are still eligible for CCP. In order to continue, the program code should be changed to reflect the AAS. The student type will remain CCPP and their student code will remain CTE.

11. Colleges are responsible for adhering to external agency guidelines that may restrict CCP students from enrolling in specific programs.

**Career Technical Education Pathway (Freshmen and Sophomores)**

The Appropriations Act of 2013, S.B. 402, amended NC General Statutes 115D-20(4)a.2 to allow “academic transition pathways for qualified freshmen and sophomore high school students that lead to a career technical education certificate or diploma in industrial and engineering technologies.”

1. The Career and College Promise Career Technical Education Pathway for freshmen and sophomores leads to an industrial or engineering certificate or diploma aligned with a high school Career Cluster.

2. The college may enroll high school freshmen and sophomores only in Engineering, Industrial, Agriculture and Natural Resources, or Transportation Systems Technologies programs, certificate and diploma programs.

3. To be eligible for enrollment, a high school student must meet the following criteria:
   a. Be a high school freshman or sophomore;
   b. A qualified freshmen must:
      i. have passed Math I with a grade of “C” or better;
      ii. scored a 3, 4 or 5 on the EOC for Math I;
      iii. meet the college ready reading score of 16 on the 8th grade Explore test; (See page 14-11 for students without Explore and/or Math I scores)
      iv. have received career pathway information outlining program requirements for completion of the certificate or diploma.; and
      v. have the recommendation of the high school principal or his/her designee (based on assessment of student maturity and ability to effectively participate in a class that may include adult students).
   c. A qualified sophomore must:
      i. have passed Math I with a grade of “C” or better;
      ii. scored a 3,4, or 5 on the EOC for Math I;
      iii. meet the college ready reading score of 16 on the 8th grade Explore test; (See page 14-11 for students without Explore and/or Math I scores);
      iv. have a weighted GPA of 3.0 on high school courses;
      v. and have received career pathway information outlining program requirements for completion of the certificate or diploma.
vi. have the recommendation of the high school principal or his/her designee (based on assessment of student maturity and ability to effectively participate in a class that may include adult students).

**Students without Explore and/or Math I Scores**

For students who do not have an Explore score or Math I score (example: homeschool students, students from a private school, or students who moved to NC from another state), the college shall establish a local policy that details which alternative assessment score will be used in place of Explore or Math I. Attachment A lists the approved assessments/scores that the college can select from for alternative scores for reading, English and math for students who do not have an Explore score and/or Math I. The assessment that is chosen locally should be documented and used consistently for only those students without the Explore and/or Math I. Students who do have Explore and Math I (those who are attending public school in NC) must meet the eligibility guidelines outlined in items 3a-3c above.

4. College Career Technical Education courses may be used to provide partial or full fulfillment of a four-unit career cluster. Where possible, students should be granted articulated credit based on the local or state North Carolina High School to Community College articulation agreement.

5. To maintain eligibility for continued enrollment, a student must
   a. Continue to make progress toward high school graduation, and
   b. Maintain a 2.0 in college coursework after completing two courses. A student who falls below a 2.0 GPA after completing two college courses will be subject to the college’s policy for satisfactory academic progress.

6. A student may be awarded a certificate or diploma prior to high school graduation. The AAS may not be awarded prior to high school graduation verification.

7. A student must enroll in one program of study and may not substitute courses in one program for courses in another. The student may change his or her program of study major to another industrial or engineering program of study with approval of the high school principal or his/her designee and the college’s chief student development administrator. A student may concurrently enroll in two engineering or industrial CTE programs of study provided the exception has been approved by the college’s Chief Academic Officer or his/her designee.

8. A student who completes the CTE certificate or diploma may continue in the same AAS as long as they are still eligible for CCP. In order to continue, the program code should be changed to reflect the AAS. The student type will remain CCPP and their student code will remain CTE.

9. Colleges are responsible for adhering to external agency guidelines that may restrict CCP students from enrolling in specific programs.
**Cooperative Innovative High School Programs**

1. Cooperative Innovative High School Programs are located on college campuses, enroll 100 or fewer students per grade level, and provide opportunities for students to complete an associate degree program or earn up to two years of college credit within five years are defined as Cooperative Innovative High School Programs.

2. Eligibility requirements for Cooperative Innovative High School Programs are established jointly by local boards of education and local boards of trustees in accordance with G.S. 115C-238.50. The AA/AS/AE/AFA/AAS may not be awarded prior to high school graduation verification. A student may be awarded a certificate or diploma prior to high school graduation.

3. The State Board of Community Colleges may waive the requirement that a Cooperative Innovative High School Program is located on the community college campus.

**Student Application Procedures**

1. The high school will document eligibility criteria (high school GPA and PLAN or other assessment scores) on the student’s transcript. A Home school or non-public high school student must submit a transcript and official test scores from an approved assessment test.

2. Students must complete a college application to be admitted into a Career and College Promise pathway.

**College Program of Study Approval Procedures**

1. A college must submit a program of study for each Career and College Promise program it plans to offer, which are in compliance with the curriculum standard and CCP policy.

2. Career and Technical Education programs of study must be in compliance with the State Board approved curriculum standard and must include a minimum of twelve (12) semester hours of credit from core courses or consist of courses in a local traditional certificate as listed in the college’s current catalog. General education courses for career and technical education programs of study must be directly related to student success in the selected major.

3. Programs of study must be approved before students can be enrolled.

4. By submitting and requesting approval for a Career and College Promise program of study, a college is verifying its capacity to teach all courses in the program of study.

5. See Section III for CCP program of study filing procedures.
Tuition and Fees
1. All curriculum courses taken by Career and College Promise students at community colleges in accordance with in G.S. 115D-20(4) are tuition-waived except courses offered on a self-supporting basis.
2. Textbooks are a student’s responsibility, however there may be local provisions for them. A student’s high school, the school district, or another local organization may cover these costs. Students should check with their principal or counselor to verify how these costs are paid.
3. Student fees (e.g., technology fees and insurance fees) are not waived for Career and College Promise students. However, local school districts and community colleges should work together to determine whether and how student fees will be paid for CCP participants.
4. Transportation funding is not available for Career and College Promise students who are enrolled in transfer pathway and/or a Career and Technical Education pathway. Cooperative Innovative High Schools (including early college high schools, middle college high schools, and other CIHS models) receive transportation funds as part of a larger funding allotment at each district.

Instructional Service Agreements
1. Colleges who serve groups of CCP students outside of their assigned service area should have a Level-One Instructional Service Agreement with the college assigned to that service area.
2. Level-One agreements should be utilized when a college is requesting permission to deliver curriculum course(s), a curriculum program courses into another college’s service area. These agreements do not involve the sharing of resources or FTE. This level of agreement does not have to be approved or kept on file by the System Office, however, it must be kept on file at participating colleges for audit purposes.

Program Accountability Plan
1. Colleges will assign student codes provided by the North Carolina Community College System Office.
2. The North Carolina Community College System Office and the Department of Public Instruction will report annually to the two governing boards on the following outcomes:
   a. The impact of dual enrollment on high school completion.
   b. The academic achievement and performance of dually enrolled high school students.
   c. The number of students who successfully complete college pathways or certificates while dually enrolled.
   d. The persistence, completion rates, and academic achievement of students who continue into college programs after high school graduation.
III. Program of Study (POS) Filing Process

College Program of Study Approval Procedures

1. A college must submit an electronic program of study through Colleague for each Career and College Promise program it plans to offer.
2. Programs of study must be approved before students can be enrolled.
3. By submitting and requesting approval for a Career and College Promise program of study, a college is verifying its capacity to teach all courses in the program of study.

Information Specific to Career Technical Education (CTE) Pathway Programs of Study

- The college must already have received State Board approval to offer the traditional program in order to file a POS for a Career Technical Education pathway (i.e. the college must be approved for Welding in order to file a POS to offer a Welding CTE pathway.)
- The college must utilize the current curriculum standard as the guideline for CTE Pathways. The curriculum standards are located at: http://www.nccommunitycolleges.edu/academic-programs/curriculum-standards
- The program of study must consist of specific course requirements and may not include elective options (pick lists) for students.
- The CTE certificate program of study must include either a minimum of 12 semester hours credit derived from the core of the curriculum standard or consist of courses in a local traditional certificate as listed in the college's catalog. Local certificates may not include course pick lists.
- Local certificates or diplomas submitted as CTE certificate pathways must include the following college comment: Courses included in this CTE program of study are offered in the college’s traditional, local certificate as listed in the college catalog.
- The college may submit more than one CTE certificate/diploma for a specific program in order to accommodate the needs of various high school districts. The college must file each as a separate certificate/diploma(s).

Information Specific to College Transfer Pathway Programs of Study

- Colleges must utilize the College Transfer Pathways for college transfer pathway program(s) of study.
- The college must already have approval to offer the Associate in Arts (A10100) in order to file a POS to offer P1012C.
- The college must already have approval to offer the Associate in Science (A10400) in order to file a POS to offer P1042C.
- The college must already have approval to offer the Associate in Engineering (A10500) in order to file a POS to offer A1052C.
IV. Student Coding

Session Law 2011-145 (section 7.1A.(d) requires the establishment and implementation of a program accountability plan to evaluate the short-term and long-term outcomes for CCP. Therefore, it is crucial that students be correctly coded.

Colleges are required to enter the Student Type (CCPP).

Student Codes are available on the XNC2 screen in Colleague:

- CTP: College Transfer Pathway
- CTE: Career and Technical Education
- CIH: Other Cooperative Innovative High School Programs
- CIE: Early College High Schools
- CIM: Middle College High Schools

Cooperative Innovative High School students should be placed in the Program of Study designated for the school.

Recoding CCP Students After High School Graduation

Students should be properly recoded when they a) complete a pathway or b) graduate from high school. When Career and College Promise students graduate from traditional high school and continue into college programs of study, it is important to end their Student Type, Pathway Type, and Program of Study in Colleague. These modifications are essential to ensure that ineligible students do not receive tuition waivers and that students are correctly coded for evaluation purposes.

Colleges should follow the steps below to re-code CCP students who graduate from high school and continue in a program of study after high school graduation:

1. Add a Student Type such as “NONE”, “NORM”, “TRAD”, or “NULL” in order to prevent consequential tuition waivers.
2. Enter end year for the high school graduation date.
3. End Career and College Promise Pathway Type.

Students who stop participating in CCP prior to high school graduation should also be recoded using the steps listed above.

V. Program Coding

College Transfer Pathway Program Codes

- Career and College Promise College Transfer Pathway Leading to an Associate in Arts - P1012C
- Career and College Promise College Transfer Pathway Leading to an Associate in Science - P1042C
- Career and College Promise College Transfer Pathway Leading to an Associate in Engineering – P1052C
CTE Program Codes

CTE program codes are designated based on the curriculum standard. However, colleges must add two characters to the CTE program code to indicate that the program is intended for CTE students.
(i.e. C55220HS – Early Childhood Education – CTE Certificate)

VI. References


CC13-010 – Career and College Promise Coding

CC13-016 – Dual Enrollment of 9th and 10th Graders

CC14-011 – Career and College Promise Operating Procedures Revisions *(SBCC 03/21/14)*
Revised College Transfer Pathways – Associate in Arts and Science

CC14-023 – Career and College Promise Operating Procedures Revisions *(SBCC 07/18/14)*
Revised College Transfer Pathways – Associate in Arts and Science

CC15-016 – Career and College Promise Provisional Status Policy

CC15-017 – Curriculum Review Committee Course Approvals (Math 271 Direct Placement Criteria)

CC15-034 – Career and College Promise Operating Procedures Revisions *(SBCC 10/30/15)*

CC16-018 – State Board of Community College Action – AE Pathway Approval (SBCC 04/15/16)

Numbered memos are located at: [http://www.nccommunitycolleges.edu/numbered-memos](http://www.nccommunitycolleges.edu/numbered-memos).
### College Readiness* Benchmarks on Approved Diagnostic Assessment Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>PLAN**</th>
<th>PSAT 2014 and earlier**</th>
<th>PSAT 2015 and Future**</th>
<th>Asset (NCCCS Cut Score)</th>
<th>COMPASS (NCCCS Cut Score)</th>
<th>Accuplacer (NCCCS Cut Score)</th>
<th>NC DAP (NCCCS Cut Score)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td>15</td>
<td>45</td>
<td>26</td>
<td>41 Writing</td>
<td>70 Writing</td>
<td>86 Sentence Skills</td>
<td>Composite score of 151 or higher ***</td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td>18</td>
<td>47</td>
<td>26</td>
<td>41 Reading</td>
<td>81 Reading</td>
<td>80 Reading</td>
<td></td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td>19</td>
<td>47</td>
<td>24.5</td>
<td>41 Numerical Skills and 41 Int. Algebra</td>
<td>47 Pre-Algebra and 66 Algebra</td>
<td>55 Arithmetic and 75 Elem. Algebra</td>
<td>7 on each assessment for DMA 010 thru 060</td>
</tr>
</tbody>
</table>

In addition to the diagnostic assessments, colleges may use the following SAT and ACT scores recommended by the testing companies as benchmarks for college readiness:*  

<table>
<thead>
<tr>
<th>SAT (Pre-March 2016)</th>
<th>SAT (March 2016 and Future)</th>
<th>Pre-ACT</th>
<th>ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>500</td>
<td>Evidence-Based Reading and Writing</td>
<td>480</td>
</tr>
<tr>
<td>Critical Reading</td>
<td>500</td>
<td>Mathematics</td>
<td>530</td>
</tr>
<tr>
<td>Mathematics</td>
<td>500</td>
<td>Mathematics</td>
<td>530</td>
</tr>
</tbody>
</table>

*To be eligible for enrollment in a College Transfer Pathway, students must demonstrate college readiness in English, reading, and mathematics on an approved test or tests. Eligibility may be demonstrated by achieving the required scores on a single test or by combining test scores from any of the approved assessments. For example, a student may combine a 19 on PLAN math with an 86 and an 80 on Accuplacer sentence skills and reading to demonstrate college readiness.

**PLAN and PSAT scores recommended by ACT and College Board as indicators of college readiness.**

***The Reading and English part of the NC DAP is an integrated assessment of reading and English skills; meeting the composite cut score score for placement into ENG 111 is one way to demonstrate college readiness in order to participate in the College Transfer Pathway.
Career and College Promise College Transfer Pathway  
Leading to the Associate in Arts (P1012C)  
The CCP College Transfer Pathway Leading to the Associate in Arts is designed for high school juniors and seniors who wish to begin study toward the Associate in Arts degree and a baccalaureate degree in a non-STEM major.

### GENERAL EDUCATION (31-32 SHC)

The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC) component of the Comprehensive Articulation Agreement.

#### English Composition (6 SHC)

*The following two English composition courses are required.*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>Writing &amp; Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112</td>
<td>Writing/Research in the Disciplines</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Select three courses from the following from at least two different disciplines (9 SHC)

**Communication**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 231</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Humanities/Fine Arts**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 111</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ART 114</td>
<td>Art History Survey I</td>
<td>3</td>
</tr>
<tr>
<td>ART 115</td>
<td>Art History Survey II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 231</td>
<td>American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 232</td>
<td>American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 241</td>
<td>British Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 242</td>
<td>British Literature II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 110</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 112</td>
<td>Introduction to Jazz</td>
<td>3</td>
</tr>
<tr>
<td>PHI 215</td>
<td>Philosophical Issues</td>
<td>3</td>
</tr>
<tr>
<td>PHI 240</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Social/Behavioral Sciences (9 SHC)

*Select three courses from the following from at least two different disciplines:*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 251</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 252</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>HIS 111</td>
<td>World Civilizations I</td>
<td>3</td>
</tr>
<tr>
<td>HIS 112</td>
<td>World Civilizations II</td>
<td>3</td>
</tr>
<tr>
<td>HIS 131</td>
<td>American History I</td>
<td>3</td>
</tr>
<tr>
<td>HIS 132</td>
<td>American History II</td>
<td>3</td>
</tr>
<tr>
<td>POL 120</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>PSY 150</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 210</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>
Math (3-4 SHC)
Select one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 143</td>
<td>Quantitative Literacy</td>
<td>3</td>
</tr>
<tr>
<td>MAT 152</td>
<td>Statistical Methods I</td>
<td>4</td>
</tr>
<tr>
<td>MAT 171</td>
<td>Precalculus Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

Natural Sciences (4 SHC)
Select 4 SHC from the following course(s):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 111</td>
<td>Descriptive Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>AST 111A</td>
<td>Descriptive Astronomy Lab</td>
<td>1</td>
</tr>
<tr>
<td>AST 151</td>
<td>General Astronomy I</td>
<td>3</td>
</tr>
<tr>
<td>AST 151A</td>
<td>General Astronomy Lab I</td>
<td>1</td>
</tr>
<tr>
<td>BIO 110</td>
<td>Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 111</td>
<td>General Biology I</td>
<td>4</td>
</tr>
<tr>
<td>CHM 151</td>
<td>General Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>GEL 111</td>
<td>Introductory Geology</td>
<td>4</td>
</tr>
<tr>
<td>PHY 110</td>
<td>Conceptual Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHY 110A</td>
<td>Conceptual Physics Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Total General Education Hours Required: 32

Academic Transition (1 SHC)
The following course is required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA 122</td>
<td>College Transfer Success</td>
<td>1</td>
</tr>
</tbody>
</table>

*OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC)
A student may take up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of “C” or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

Total Semester Hours Credit (SHC) in Program: 32-41*

High school students in the CCP College Transfer Pathway Leading to the Associate in Arts must complete the entire pathway before taking additional courses in the Associate in Arts degree with the exception of mathematics courses beyond MAT 171 in the Associate in Arts.
Career and College Promise College Transfer Pathway  
Leading to the Associate in Science (P1042C)

The CCP College Transfer Pathway Leading to the Associate in Science is designed for high school juniors and seniors who wish to begin study toward the Associate in Science degree and a baccalaureate degree in a STEM or technical major.

**GENERAL EDUCATION (34 SHC)**  
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC).

<table>
<thead>
<tr>
<th>English Composition (6 SHC)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The following two English composition courses are required.</em></td>
</tr>
</tbody>
</table>
| ENG 111 Writing & Inquiry           | (3 SHC)  
| ENG 112 Writing/Research in the Disciplines | (3 SHC)  

*Select two courses from the following from at least two different disciplines (6 SHC)*

**Communication**  
COM 231 Public Speaking (3 SHC)

**Humanities/Fine Arts**  
ART 111 Art Appreciation (3 SHC)  
ART 114 Art History Survey I (3 SHC)  
ART 115 Art History Survey II (3 SHC)  
ENG 231 American Literature I (3 SHC)  
ENG 232 American Literature II (3 SHC)  
ENG 241 British Literature I (3 SHC)  
ENG 242 British Literature II (3 SHC)  
MUS 110 Music Appreciation (3 SHC)  
MUS 112 Introduction to Jazz (3 SHC)  
PHI 215 Philosophical Issues (3 SHC)  
PHI 240 Introduction to Ethics (3 SHC)

**Social/Behavioral Sciences (6 SHC)**  
*Select two courses from the following from at least two different disciplines:*

| ECO 251 Principles of Microeconomics | (3 SHC)  
| ECO 252 Principles of Macroeconomics | (3 SHC)  
| HIS 111 World Civilizations I | (3 SHC)  
| HIS 112 World Civilizations II | (3 SHC)  
| HIS 131 American History I | (3 SHC)  
| HIS 132 American History II | (3 SHC)  
| POL 120 American Government | (3 SHC)  
| PSY 150 General Psychology | (3 SHC)  
| SOC 210 Introduction to Sociology | (3 SHC)  

Effective Term  
Summer 2016
Math (8 SHC)
Select two courses from the following:
- MAT 171 Precalculus Algebra (4 SHC)
- MAT 172 Precalculus Trigonometry (4 SHC)
- MAT 263 Brief Calculus (4 SHC)
- MAT 271 Calculus I (4 SHC)
- MAT 272 Calculus II (4 SHC)

Natural Sciences (8 SHC)
Select 8 SHC from the following course(s):
- AST 151 General Astronomy I (3 SHC) and AST151A General Astronomy Lab I (1 SHC)
- BIO 110 Principles of Biology (4 SHC)
- BIO 111 General Biology I (4 SHC) and BIO 112 General Biology II (4 SHC)
- CHM 151 General Chemistry I (4 SHC) and CHM 152 General Chemistry II (4 SHC)
- GEL 111 Introductory Geology (4 SHC)
- PHY 110 Conceptual Physics (3 SHC) and PHY 110A Conceptual Physics Lab (1 SHC)
- PHY 151 College Physics I (4 SHC) and PHY 152 College Physics II (4 SHC)
- PHY 251 General Physics I (4 SHC) and PHY 252 General Physics II (4 SHC)

Total General Education Hours Required: 34

Academic Transition (1 SHC)
The following course is required:
- ACA 122 College Transfer Success (1 SHC)

*OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC)
A student may take up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of “C” or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

Total Semester Hours Credit (SHC) in Pathway: 35-43*

High school students in the CCP College Transfer Pathway Leading to the Associate in Science must complete the entire pathway before taking additional courses in the Associate in Science degree with the exception of mathematics courses beyond MAT 271.

Please see CC15-017 at http://www.nccommunitycolleges.edu/numbered-memos for direct placement criteria for MAT 271 Calculus I.
Career and College Promise College Transfer Pathway  
Leading to the Associate in Engineering (P1052C)  

The College Transfer Pathway (CCP) leading to the Associate in Engineering is designed for high school juniors and seniors who wish to begin study toward the Associate in Engineering degree and a baccalaureate degree in a STEM or technical major.

### GENERAL EDUCATION (28 SHC):
The general education requirement includes study in courses selected from the Universal General Education Transfer Component (UGETC).

### English Composition (6 SHC)
The following two English composition courses are required.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>Writing and Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112</td>
<td>Writing/Research in the Disciplines</td>
<td>3</td>
</tr>
</tbody>
</table>

### Humanities, Fine Arts and Communications: Select one course from the following (3 SHC):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 111</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ART 114</td>
<td>Art History Survey I</td>
<td>3</td>
</tr>
<tr>
<td>ART 115</td>
<td>Art History Survey II</td>
<td>3</td>
</tr>
<tr>
<td>COM 231</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ENG 231</td>
<td>American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 232</td>
<td>American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 241</td>
<td>British Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 242</td>
<td>British Literature II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 110</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 112</td>
<td>Introduction to Jazz</td>
<td>3</td>
</tr>
<tr>
<td>PHI 215</td>
<td>Philosophical Issues</td>
<td>3</td>
</tr>
<tr>
<td>PHI 240</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Social/Behavioral Sciences: The following course is required (3 SHC):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 251</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Mathematics (8 SHC)
The following courses are required (8 SHC):

*Calculus I is the lowest level math course that will be accepted by the engineering programs for transfer as a math credit. Students who are not calculus-ready will need to take additional math courses.*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 271</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MAT 272</td>
<td>Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

High school students in the CCP College Transfer Pathway Leading to the Associate in Engineering must complete the entire pathway before taking additional courses in the Associate in Engineering degree with the following exception: Students may take additional math courses beyond MAT 272 that are required for the Associate in Engineering degree.

Please see CC16-025 at [http://www.nccommunitycolleges.edu/search/content/numbered%20memos](http://www.nccommunitycolleges.edu/search/content/numbered%20memos) for direct placement criteria for MAT 271 Calculus I.
**Natural Sciences (8 SHC)**

*Select 8 SHC from the following course(s):*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 151</td>
<td>General Chemistry I</td>
<td>4 SHC</td>
</tr>
<tr>
<td>PHY 251</td>
<td>General Physics I</td>
<td>4 SHC</td>
</tr>
<tr>
<td>PHY 252</td>
<td>General Physics II</td>
<td>4 SHC</td>
</tr>
</tbody>
</table>

---

**Other Required Hours (6 SHC)**

**Academic Transition (1 SHC)**

*The following course is required:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA 122</td>
<td>College Transfer Success</td>
<td>1 SHC</td>
</tr>
</tbody>
</table>

**Engineering (5 SHC)**

*The following courses are required:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 150</td>
<td>Introduction to Engineering</td>
<td>2 SHC</td>
</tr>
<tr>
<td>DFT 170</td>
<td>Engineering Graphics</td>
<td>3 SHC</td>
</tr>
</tbody>
</table>

---

**PREREQUISITE GENERAL EDUCATION HOURS (0-8 SHC)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 171</td>
<td>Pre-Calculus Algebra</td>
</tr>
<tr>
<td>MAT 172</td>
<td>Pre-Calculus Trigonometry</td>
</tr>
</tbody>
</table>

*Students who do not place directly into MAT 271 must complete MAT 171 and MAT 172 prior to enrolling in MAT 271 Calculus I.*

---

**OPTIONAL GENERAL EDUCATION HOURS (0-8 SHC)**

**Foreign Language:**

A student may take up to 8 SHC of foreign language courses and accompanying labs, in a single language, designated as General Education in the CAA as a part of this pathway. These courses are not a part of the Universal General Education Transfer Component. Students who complete these courses with a grade of “C” or better will receive transfer credit. The receiving university will determine whether the courses will count as general education, pre-major, or elective credit.

---

**Total Semester Hours Credit (SHC) in Pathway: 34-50**

*AE Pathway approved by SBCC on 4/15/2016.*
**Curriculum Standard for Engineering and Technology: Applied, Automation, Mechatronics 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 2015 (2015*03) Spring 2017 (2017*01)

### Program Majors Under Pathway

<table>
<thead>
<tr>
<th>Program Major / Classification of Instruction Programs (CIP) Code</th>
<th>Credential Level(s) Offered</th>
<th>Program Major Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Engineering Technology</td>
<td>CIP Code: 15.0000 AAS/Diploma/Certificate</td>
<td>A40130</td>
</tr>
<tr>
<td>Automation Engineering Technology</td>
<td>CIP Code: 15.0406 AAS/Diploma/Certificate</td>
<td>A40120</td>
</tr>
<tr>
<td>Mechatronics Engineering Technology</td>
<td>CIP Code: 15.0403 AAS/Diploma/Certificate</td>
<td>A40350</td>
</tr>
</tbody>
</table>

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

**Applied Engineering Technology:** A course of study that prepares the students to use basic engineering principles and technical skills to solve technical problems in various types of industry. The course work emphasizes analytical and problem-solving skills. The curriculum includes courses in safety, math, physics, electricity, engineering technology, and technology-specific specialty areas. Graduates should qualify for employment in a wide range of positions in research and development, manufacturing, sales, design, inspection, or maintenance. Employment opportunities exist in automation, computer, electrical, industrial, or mechanical engineering fields, where graduates will function as engineering technicians.

**Automation Engineering Technology:** A course of study that prepares the students to use basic engineering principles and technical skills to develop, install, calibrate, modify and maintain automated systems. Includes instruction in computer systems; electronics and instrumentation; programmable logic controllers (PLCs); electric, hydraulic and pneumatic control systems; actuator and sensor systems; process control; robotics; applications to specific industrial tasks. The graduates of this curriculum will be prepared for employment in industries that utilize control systems, computer hardware and software, electrical, mechanical and electromechanical devices in their automation systems.

**Mechatronics Engineering Technology:** A course of study that prepares the students to use basic engineering principles and technical skills in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures. Graduates should be qualified for employment in industrial maintenance and manufacturing including assembly, testing, startup, troubleshooting, repair, process improvement, and control systems, and should qualify to sit for Packaging Machinery Manufacturers Institute (PMMI) mechatronics or similar industry examinations.

*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; CRC Revised—Electronic Only 05/29/13; Editorial Revision 08/21/13; Editorial Revision 01/17/14; Editorial Revision 10/16/14; SBCC Revised 03/20/15; SBCC Revised 04/17/15; Prefix Addition 08/01/15; Editorial Revision 01/26/16.
Mission Critical Operations: The Mission Critical Operations curriculum prepares graduates for employment in a wide range of positions in specific mission critical environments, operations technology, and maintenance. Course work includes the development of a student’s ability to maintain technically sophisticated systems for business continuity and near continuous uptime using engineering, information technology, and industrial management and maintenance skills. The course work emphasizes analytical and problem-solving skills required to sustain high availability national security interests and includes instruction in electromechanical systems, networking, automation, cybersecurity, emergency management and systems integration. Graduates should qualify for employment as entry-level technicians with businesses, industries, educational systems, and governmental agencies in national critical infrastructure areas including, but not limited to, communications, emergency services, energy, financial services, healthcare, information technology, and transportation.

I. General Education Academic Core

[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.

<table>
<thead>
<tr>
<th>Engineering and Technology: Applied, Automation and Mechatronics Engineering Technology</th>
<th>AAS</th>
<th>Diploma</th>
<th>Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education Academic Core</td>
<td>Minimum General Education Hours Required:</td>
<td>15 SHC</td>
<td>6 SHC</td>
</tr>
<tr>
<td>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. *Recommended certificate and diploma level curriculum courses. These courses may not be included in associate degree programs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications:</td>
<td>6 SHC</td>
<td>3-6 SHC</td>
<td>Optional</td>
</tr>
<tr>
<td>*COM 101 Workplace Communication</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM 110 Introduction to Communication</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM 120 Intro Interpersonal Com</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM 231 Public Speaking</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*ENG 101 Applied Communications I</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*ENG 102 Applied Communications II</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 110 Freshman Composition</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111 Writing and Inquiry</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 114 Professional Research &amp; Reporting</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 116 Technical Report Writing</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts:</td>
<td>3 SHC</td>
<td>0-3 SHC</td>
<td>Optional</td>
</tr>
<tr>
<td>*HUM 101 Values in the Workplace</td>
<td>2 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 110 Technology and Society</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 115 Critical Thinking</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 230 Leadership Development</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHI 230 Introduction to Logic</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHI 240 Introduction to Ethics</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Sciences:</td>
<td>3 SHC</td>
<td>0-3 SHC</td>
<td>Optional</td>
</tr>
<tr>
<td>ECO 151 Survey of Economics</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECO 251 Prin of Microeconomics</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 110 Introduction to Geography</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 111 World Regional Geography</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEO 131 Physical Geography I</td>
<td>4 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*PSY 101 Applied Psychology</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*PSY 102 Human Relations</td>
<td>2 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 118 Interpersonal Psychology</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 135 Group Processes</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 150 General Psychology</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*SOC 105 Social Relationships</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 210 Introduction to Sociology</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 215 Group Process</td>
<td>3 SHC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approved by the State Board of Community Colleges on August 16, 2012; Editorial Revision 09/08/12; Editorial Revision 12/14/12; CRC Revised—Electronic Only 05/29/13; Editorial Revision 08/21/13; Editorial Revision 01/17/14; Editorial Revision 10/16/14; SBCC Revised 03/20/15; SBCC Revised 04/17/15; Prefix Addition 08/01/15; Editorial Revision 01/26/16.
**Natural Sciences/Mathematics:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 120</td>
<td>3 SHC</td>
</tr>
<tr>
<td>MAT 121</td>
<td>3 SHC</td>
</tr>
<tr>
<td>MAT 161</td>
<td>3 SHC</td>
</tr>
<tr>
<td>MAT 171</td>
<td>3 SHC</td>
</tr>
<tr>
<td>MAT 175</td>
<td>4 SHC</td>
</tr>
<tr>
<td>MAT 223</td>
<td>3 SHC</td>
</tr>
<tr>
<td>MAT 271</td>
<td>4 SHC</td>
</tr>
</tbody>
</table>

**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.

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: Applied, Automation, Mechatronics**

**Engineering Technology**

<table>
<thead>
<tr>
<th>Minimum Major Hours Required:</th>
<th>AAS</th>
<th>Diploma</th>
<th>Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>49</td>
<td>30</td>
<td>12</td>
</tr>
</tbody>
</table>

Courses required for a diploma are designated with *

A. **Technical Core:**

*Computer Applications

Choose one:

- CIS 110 Introduction to Computers 3 SHC
- EGR 111 Eng Comp and Careers 3 SHC
- EGR 125 Appl Software for Tech 2 SHC
- ELC 127 Software for Technicians 2 SHC

*Safety

Choose one:

- ISC 112 Industrial Safety 2 SHC
- ISC 115 Construction Safety 2 SHC

B. **Program Major(s):** For AAS Degree select one program major.

**Applied Engineering Technology**

*Computers

Choose one:

- DFT 119 Basic CAD 2 SHC
- ELC 127 Software for Technicians 2 SHC

*Electricity

Choose one:

- ELC 131 Circuit Analysis I 4 SHC
- ELC 138 DC Circuit Analysis 4 SHC
- ELC 139 AC Circuit Analysis 4 SHC

*Engineering

Choose one:

- HYD 110 Hydraulics/Pneumatics I 3 SHC
- HYD 112 Hydraulics/Med/Heavy Duty 2 SHC
- HYD 115 Industrial Hydraulics 3 SHC
- MNT 165 Mechanical Industrial Sys 2 SHC

*Motors and Controls

Choose one:

- ELC 117 Motors and Controls 4 SHC
- ELC 128 Intro to PLC 3 SHC
### *Specialty*

**Choose one:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATR 112</td>
<td>Intro to Automation</td>
<td>3</td>
</tr>
<tr>
<td>CET 110</td>
<td>Intro to CET</td>
<td>1</td>
</tr>
<tr>
<td>ELN 131</td>
<td>Analog Electronics I</td>
<td>4</td>
</tr>
<tr>
<td>ISC 129</td>
<td>Qual Testing Lab-Tech</td>
<td>3</td>
</tr>
<tr>
<td>MEC 110</td>
<td>Intro to CAD/CAM</td>
<td>2</td>
</tr>
<tr>
<td>PCI 145</td>
<td>Process Control Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

### Automation Engineering Technology

**Choose one:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATR 112</td>
<td>Intro to Automation</td>
<td>3</td>
</tr>
<tr>
<td>ATR 215</td>
<td>Sensors and Transducers</td>
<td>3</td>
</tr>
<tr>
<td>ELC 128</td>
<td>Intro to PLC</td>
<td>3</td>
</tr>
<tr>
<td>ELN 133</td>
<td>Digital Electronics</td>
<td>4</td>
</tr>
<tr>
<td>PCI 171</td>
<td>Fieldbus Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

### *Basic Electricity*

**Choose one set:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELC 131</td>
<td>Circuit Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>ELC 133</td>
<td>Circuit Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td>ELC 138</td>
<td>DC Circuit Analysis</td>
</tr>
<tr>
<td>OR</td>
<td>ELC 139</td>
<td>AC Circuit Analysis</td>
</tr>
</tbody>
</table>

### Specialty

**Choose one:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATR 121</td>
<td>Intro to Machine Vision</td>
<td>4</td>
</tr>
<tr>
<td>BAT 111</td>
<td>Building Automation Systems</td>
<td>2</td>
</tr>
<tr>
<td>HYD 110</td>
<td>Hydraulics/Pneumatics I</td>
<td>3</td>
</tr>
<tr>
<td>MEC 130</td>
<td>Mechanisms</td>
<td>3</td>
</tr>
<tr>
<td>MNT 250</td>
<td>PLC Interfacing</td>
<td>4</td>
</tr>
</tbody>
</table>

### Mechatronics Engineering Technology

**Choose one:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATR 112</td>
<td>Intro to Automation</td>
<td>3</td>
</tr>
<tr>
<td>ELC 213</td>
<td>Instrumentation</td>
<td>4</td>
</tr>
</tbody>
</table>

### *Basic Electricity*

**Choose one course or set:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELC 111</td>
<td>Intro to Electricity</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>ELC 112</td>
<td>DC/AC Electricity</td>
</tr>
<tr>
<td>OR</td>
<td>ELC 131</td>
<td>Circuit Analysis I</td>
</tr>
<tr>
<td>OR</td>
<td>ELC 138</td>
<td>DC Circuit Analysis</td>
</tr>
<tr>
<td>OR</td>
<td>ELC 139</td>
<td>AC Circuit Analysis</td>
</tr>
</tbody>
</table>

### Drawing

**Choose one:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFT 119</td>
<td>Basic CAD</td>
<td>2</td>
</tr>
<tr>
<td>DFT 151</td>
<td>CAD I</td>
<td>3</td>
</tr>
<tr>
<td>DFT 154</td>
<td>Intro Solid Modeling</td>
<td>3</td>
</tr>
<tr>
<td>DFT 170</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>EGR 120</td>
<td>Eng and Design Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ELC 132</td>
<td>Electrical Drawings</td>
<td>2</td>
</tr>
</tbody>
</table>

### Fluid Mechanics

**Choose one:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYD 110</td>
<td>Hydraulics/Pneumatics I</td>
<td>3</td>
</tr>
<tr>
<td>HYD 180</td>
<td>Pneumatics in Automation</td>
<td>3</td>
</tr>
<tr>
<td>MEC 265</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Mechanical Drives

**Choose one:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>SHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEC 130</td>
<td>Mechanisms</td>
<td>3</td>
</tr>
<tr>
<td>MEC 275</td>
<td>Engineering Mechanisms</td>
<td>3</td>
</tr>
</tbody>
</table>
Machines

Choose one course or set:

- ELC 117 Motors and Controls 4 SHC
- ELC 130 Advanced Motors/Controls 3 SHC
- ELC 135 Electrical Machines I 3 SHC
- ELC 136 Electrical Machines II 4 SHC

Programmable Logic Controllers (Choose one):

- ELC 128 Intro to PLC 3 SHC
- ELN 260 Prog Logic Controllers 4 SHC

*Physics (Choose one):

- PHY 131 Physics-Mechanics 4 SHC
- PHY 151 College Physics I 4 SHC

Mission Critical Operations

- *MCO 110 Intro to MCO 3 SHC
- *MCO 115 MCO Infrastructure 3 SHC
- MCO 210 Critical Site Operations 3 SHC

Operations Technology

- ATR 112 Intro to Automation 3 SHC
- *MNT 222 Industrial Sys Schematics 2 SHC

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

AHR, ALT, ATR, BAT, BPM, BPR, BTB, BTC, BUS, CCT, CEG, CET, CHM, CIS, CIV, CMT, CSC, CTI, CTS, DBA, DDF, DEA, DFT, EGR, ELC, ELN, EPP, EPT, FBG, GRA, HET, HPC, HYD, ISC, LOG, MAC, MAT, MCM, MCO, MEC, MKT, MLG, MNT, MPS, MSM, NET, NOS, NUC, OMT, PCI, PHY, PKG, PMT, RCT, RVM, SEC, SST, TCT, TDP, TEL, TNE, TRN, WAT, WBL, WEB and WLD

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](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](http://www.nc-net.info/NC_career_clusters_guide.php) or [http://www.careertech.org](http://www.careertech.org).**

---

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

<table>
<thead>
<tr>
<th></th>
<th>AAS</th>
<th>Diploma</th>
<th>Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum General Education Hours</td>
<td>15</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Minimum Major Hours</td>
<td>49</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>Other Required Hours</td>
<td>0-7</td>
<td>0-4</td>
<td>0-1</td>
</tr>
<tr>
<td><strong>Total Semester Hours Credit (SHC)</strong></td>
<td><strong>64-76</strong></td>
<td><strong>36-48</strong></td>
<td><strong>12-18</strong></td>
</tr>
</tbody>
</table>

Approved by the State Board of Community Colleges on August 16, 2012; Editorial Revision 09/08/12; Editorial Revision 12/14/12; CRC Revised—Electronic Only 05/29/13; Editorial Revision 08/21/13; Editorial Revision 01/17/14; Editorial Revision 10/16/14; SBCC Revised 03/20/15; SBCC Revised 04/17/15; Prefix Addition 08/01/15; Editorial Revision 01/26/16.