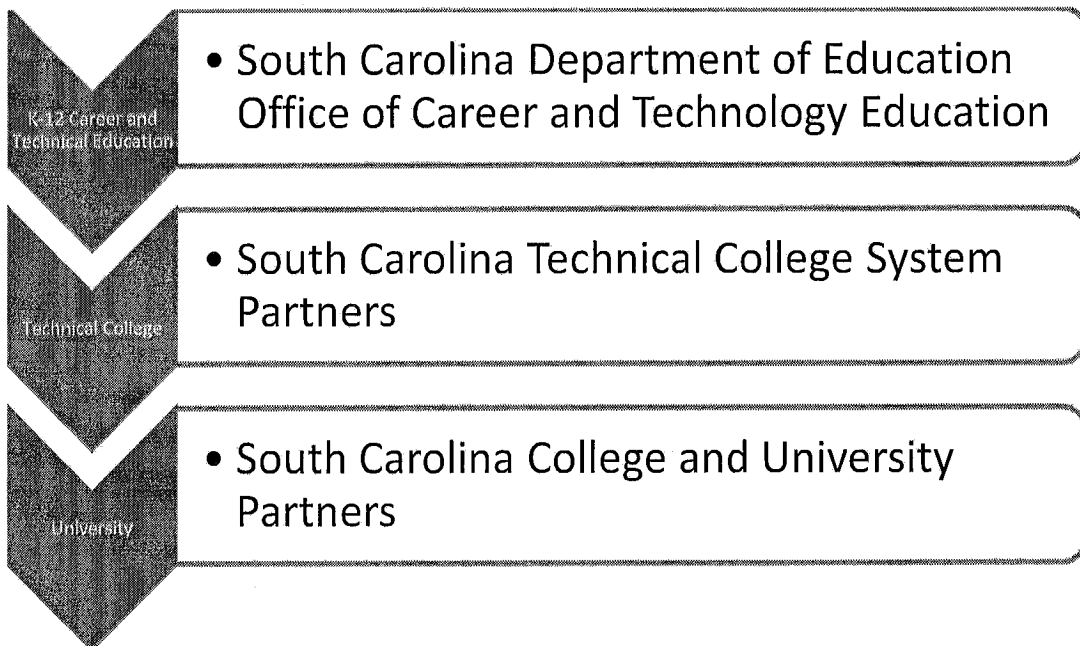


**SOUTH CAROLINA DUAL CREDIT  
ARTICULATION PERSONAL PATHWAYS  
(SC-DCAPP)**

**Project Lead The Way (Pre-  
Engineering) SC-DCAPP State  
Agreement**



**SOUTH CAROLINA DUAL CREDIT ARTICULATION PERSONAL PATHWAY AGREEMENT  
(DCAPP) BETWEEN  
SOUTH CAROLINA COLLEGES OF ENGINEERING AND ENGINEERING TECHNOLOGY,  
SOUTH CAROLINA TECHNICAL COLLEGES  
AND  
SOUTH CAROLINA DEPARTMENT OF EDUCATION, OFFICE OF CAREER AND TECHNOLOGY  
EDUCATION: PROJECT LEAD THE WAY (PRE-ENGINEERING)**

**INTRODUCTION:**

Consistent with both the South Carolina Education and Economic Development Act and the Perkins Act of 2006 [Section. 122(c)(1)(A)], a South Carolina Dual Credit Articulation Personal Pathway *1) incorporates secondary and postsecondary elements; 2) includes coherent and rigorous content aligned with challenging academic standards and relevant career and technical content in a coordinated, non-duplicative progression of courses; 3) includes the opportunity for secondary students to participate in dual or concurrent enrollment programs or other ways to participate or acquire postsecondary education credits; and 4) leads to an industry recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.*

A South Carolina Dual Credit Articulation Personal Pathway (SC-DCAPP) formalizes the arrangement between secondary and post secondary educational systems to grant college credit to students who successfully complete specified standards/learning outcomes/competencies common to both educational levels. The agreement indicates that a particular career pathway consisting of a four-course high school sequence of courses, or major, with designated complementary coursework is connected to a particular postsecondary certificate, diploma, associate degree or bachelors degree offered by one or more technical colleges or other four-year postsecondary institution. This agreement describes the dual credit options available and includes both transcribed and exemption credit opportunities. It will also guide the pathway's representation in the South Carolina Electronic Individual Graduation Plan (e-IGP) System.

**PURPOSE:**

This agreement establishes a plan whereby the South Carolina Colleges of Engineering and Engineering Technologies and South Carolina Technical Colleges establish a pathway and a coordinated advising system with the State Department of Education, Office of Career and Technology Education. The pathway will serve to facilitate the articulation or transfer of credit earned by South Carolina high school or technical college students enrolled in the Project Lead The Way Pre-Engineering curriculum sequence into the State's College and University Engineering and Engineering Technology degree programs. This SC-DCAPP should provide participating students with the opportunity to continue their education at the postsecondary level in a non-duplicative sequence of courses.

**ENABLING STATE REGULATIONS:**

The following are enabling state regulations:

- Three postsecondary hours in an accredited associate degree or baccalaureate program will be equal to one high school Carnegie Unit. (South Carolina R43-234)
- Dual credit courses taken in an accredited associate or baccalaureate degree program will carry the same weighted average as an AP course. (South Carolina Uniform Grading Policy)

**AGREEMENTS AND PROCEDURE:**

**Scope:** This agreement will specify the methodology by which students may use this Statewide Pre-Engineering Pathway to articulate or transfer pre-engineering credits. Participating high schools who desire for students to be able to articulate or transfer credits to participating Colleges of Engineering or Engineering Technology and to participating Technical College Engineering Technology associate degree programs shall follow the procedures specified in this document for the Project Lead the Way Pre-Engineering Pathway. The Pathway will also cover procedures for students of participating Technical Colleges who are participating Project Lead the Way Community College Partners to articulate and transfer credit to South Carolina Colleges of Engineering or Engineering Technology.

Nothing in this executed SC-DCAPP prohibits any institution from signing and participating in a local articulation agreement. Specific agreements existing among South Carolina institutions may continue to exist and function separate from this DCAPP.

***Term:***

This formal Agreement is reviewed and signed by the State Director of Career and Technology Education and the President or Chief Academic Officer/Dean of each applicable postsecondary institution. The Agreement will ultimately reside in the State's electronic articulation system maintained by the South Carolina Commission on Higher Education.

This Agreement may be terminated by either party at any time upon three (3) months' written notice provided, however, that such termination shall not be effective until the end of the academic term then in progress at participating institutions; and provided further that such termination shall not affect the progress of any student currently enrolled in the program.

The agreement shall be reviewed annually to assess the articulation or transfer courses for academic performance of students and publications associated with this Agreement.

***Number of Credits to Be Awarded:***

All Project Lead the Way Pre-Engineering Courses are offered for articulation or transfer as 3.0 credit hour courses.

***Procedures Specific to the Pathway:***

The following are procedures specific to the pathway:

- All High Schools or Technical Colleges where applicable transcribed credit originates must use the Project Lead the Way curriculum and must possess and maintain site certification within the designated Project Lead the Way certification timeframe.
- All instructors at High Schools or Technical Colleges where credit originates must possess Project Lead the Way credentials to teach the specific course(s) to be articulated or transferred.
- All certified sites must participate in Project Lead the Way End-of-Course testing in accordance with Project Lead the Way procedures.
- Colleges or Universities which are part of the SC-DCAPP program but which are not Project Lead the Way certified sites may accept the credit(s) for specified courses in the pathway sequence in accordance with this agreement and their own policies and procedures.
- Colleges or Universities may award exemption credit under this agreement for credit(s) earned from a certified high school site based on the Project Lead the Way End-of Course College Level Test procedures in accordance with the Project Lead the Way certification process.
- All Project Lead the Way faculty in both High Schools and Technical Colleges must participate in annual professional development offered on site in both spring and fall at either Orangeburg--Calhoun Technical College or Piedmont Technical College. They may also offer credentials earned in the Project Lead the Way Virtual Academy to meet this requirement. Ongoing professional development offerings will be provided at no charge to faculty.

**Required Faculty Professional Development, Credentials, or Certifications, Including Professional Development for Guidance Counselors**

The following are faculty procedures specific to the pathway:

- All Project Lead the Way faculty at High School or Technical College sites where credit originates must successfully complete the two week training program at a

Project Lead the Way University Affiliate site and be awarded a credential by the Affiliate to teach the specific course curriculum.

- Individual instructor professional development is subject to verification during site certification as specified by Project Lead the Way procedure. Individual instructors must maintain copies of professional development certificates awarded upon completion of training.
- All High School or Technical College sites where credit originates must have a counselor who has successfully completed the Project Lead the Way University Affiliate counselor training program.

***Transferability of Credits:***

Transferability of credit is defined in each *Institution's Participation Display (Chart A)*.

***Credit Options:***

Both Transcribed and Exemption credit will be available as specified in the ***Procedures Specific to the Pathway*** section above as specified in each participating Institution's Participation display (*Chart A*).

***Additional Credit Options for either Major or Complementary Courses:***

Project Lead the Way Capstone or Specialty Courses may be available for Transcribed or Exemption credit as specified in each individual Institution's Participation display (*Chart A*).

***Commitment Period:***

See ***Term*** section specified above.

***Student Application Procedures for SC-DCAPP credit***

***a. Student Eligibility:***

- In order for transcribed credit to be awarded, it must be applied for during the calendar year/school year during which the Project Lead the Way course is completed.
- Exemption credit may be awarded upon proof of successful course completion and is subject to criteria specified in each Institution's *Chart A* display.
- Students may request the opportunity to test out based on each participating Institution's policy and procedure.
- Students meeting criteria above will receive transfer credit for courses in accordance with the University's transfer policies.

***b. Timeline for Application:***

Timelines are specified above. Transferability of transcribed credit may be subject to individual institutional policies.

**c. Application Process:**

- Students must submit transcript from institution where credit is transcribed to any participating state institution.
- Students may request exemption credit with accompanying proof of successful course completion and is subject to criteria specified in each Institution's *Chart A* display.
- Students may request the opportunity to test out based on each participating Institution's policy and procedure.

**OTHER PATHWAY CONSIDERATIONS:**

Universities will report to participating Technical Colleges on the academic progress of its transfer students for the purposes of advising potential transfer students and evaluating this Agreement in accordance with existing procedures. This procedure is governed by South Carolina Commission on Higher education guidelines.

Each participating College and University shall designate appropriate members of its faculty as Pre-Engineering Advisors to counsel and assist students desiring to transfer to engineering programs. Each institution will designate an officer responsible for communication and resolution of questions about this Agreement.

Institutions shall publish, in appropriate documents for recruitment and advising purposes, information about the nature and procedures for this Agreement.

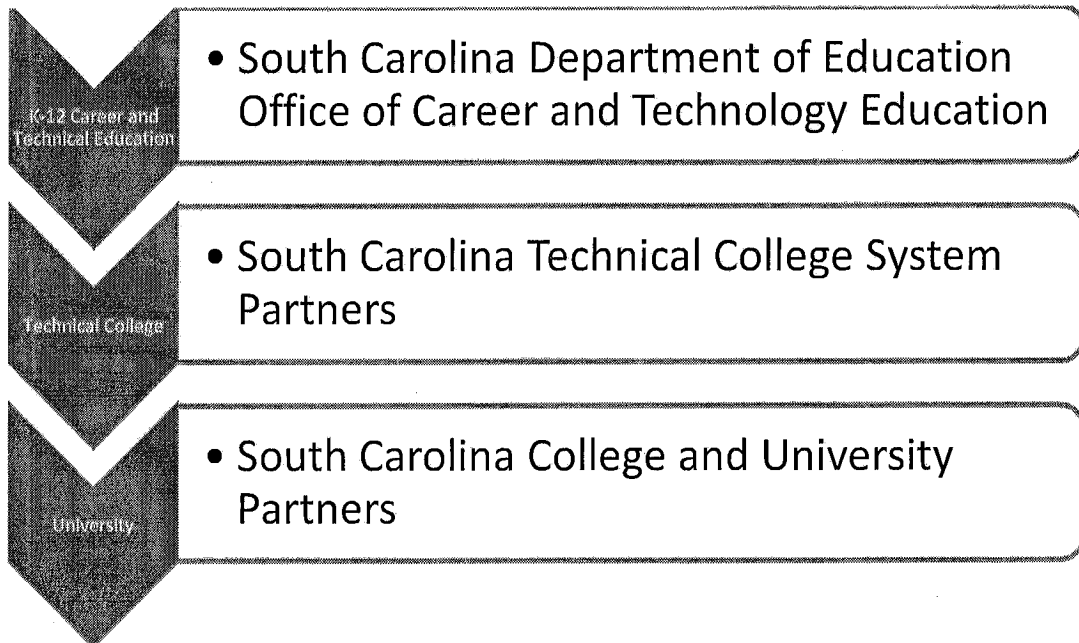
***Course Alignment Table for Each Participating Institution with Signature Page:***

The following Institutional *Chart A* display will detail the following if applicable to the articulation process and will serve as the Institution's commitment to the SC-DCAPP for Pre-Engineering Project Lead the Way pathway:

- ***Sequence of Courses a High School Student May Complete in the Approved SC-DCAPP and its College or University Course Equivalent***
- ***Postsecondary Course Description(s)***
- ***Minimum Course Grade(s) for Each Specified Course (if applicable)***
- ***Minimum Assessment(s) Score(s) (if applicable)***

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**Project Lead The Way™ (Pre-Engineering)  
SC-DCAPP State Agreement Institutional  
Participation Display (Chart A)**



The chart below indicates how credit at the participating institution is transcribed or exempted:

<b>PLTW Course</b>	<b>Technical College Course Number</b>	<b>Technical College Course Title</b>	<b>Technical College Course Description</b>	<b>College of Engineering/ Engineering Technology Course Number</b>
Introduction to Engineering Design  (Foundation Course)	EGT 152	Fundamentals of CAD	This course includes a related series of problems and exercises designed to give the student an understanding of the computer graphics station as a drafting tool.	
Principles of Engineering  (Foundation Course)	EGR 130	Engineering Technology Applications and Programming	This course covers the development and use of computer programs to solve engineering technology problems.	
Digital Electronics  (Foundation Course)	EET 140	Digital Electronics	This course is a study of the fundamentals of logic theory and circuits. Circuits are analyzed mathematically and tested using simulation software and electronic instruments.	
Computer Integrated Manufacturing  (Specialty Course)	CIM 131	Computer Integrated Manufacturing	This course is a comprehensive overview of the total manufacturing operation.	
Biotechnology  (Specialty Course)	BTN 101	Introduction to Biotechnical Engineering	This is an introductory course which exposes students to the diverse fields of biotechnology, biomedical engineering, bioprocesses, & related areas.	
Civil Engineering and Architecture  (Specialty Course)	AET 101	Building Systems I	An introductory study of the fundamental concepts of design and construction techniques in residential, commercial, and	



			industrial buildings.	
Engineering Design and Development  (Capstone Course)	EGR 184	Problem Based Integrated Technology I	An introduction of workplace skills such as problem solving, teamwork, computers, and communications on applications in mathematics and science competencies.	
Aerospace Engineering				

\_\_\_\_\_ This Technical College is a Project Lead the Way Certified Site.  
 \_\_\_\_\_ This Technical College is in the process of becoming a Project Lead the Way Certified Site.

**Note: Each Four-Year Institution should complete the last column with their course numbers.**

\*\*\*\*\*

SIGNATURE OF RESPONSIBLE AUTHORITY AT PARTICIPATING SC-DCAPP Project Lead the Way INSTITUTION

Name of Institution: \_\_\_\_\_

Representative: \_\_\_\_\_

Representative's Title: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

***Appendix A: Agency Contacts***

Mr. B.T. Martin  
Education Associate  
South Carolina Department of Education  
Office of Career and Technology Education  
803-734-3398  
[btmartin@ed.sc.gov](mailto:btmartin@ed.sc.gov)



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Outreach, Recruitment, Retention Director  
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Columbia, South Carolina 29208  
803-777-7505 voice  
803-777-3818 fax  
[donn@cec.sc.edu](mailto:donn@cec.sc.edu)

Hope E. Rivers  
Senior Manager for Curriculum & Instruction  
SC Technical College System  
[Riversh@sctechsystem.edu](mailto:Riversh@sctechsystem.edu)

803.896.5357 (Phone)  
803.896.5363 (Fax)



***Appendix B: Crosswalk of Industry Validated Standards (not required for national standards or nationally recognized curriculum)***

Project Lead the Way is a nationally recognized curriculum and is not subject to this requirement.

***Appendix C: Assessment or Certification Plan***

Specified within Body of Agreement.