Delaware Department of Education
Career & Technical Education
Policies and Procedures

Teaching and Learning Branch

Career & Technical Education and STEM Office

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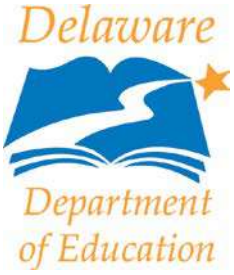

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SECTION I - INTRODUCTION

Delaware Career & Technical Education Vision, Mission, and Core Values

Delaware is at the forefront of education reform in the United States and uniquely positioned to be a model for the nation. The Delaware Department of Education is committed to serving every student and ensuring that all children are career and college ready. This expectation has shaped extensive school reform, including the alignment of academic and technical skills within a comprehensive model of Career and Technical Education that reflects the needs of our economy and creates a systemic process for career preparation. This document will serve as a guide for the adoption and development of programs of study in Delaware's charter, comprehensive, and technical school districts.

Delaware Department of Education
Career & Technical Education Core Values

Value & Responsibility – We strive to continuously improve all aspects of our work and create value for our customers, stakeholders, and students.

Shared Leadership & Accountability – We model leadership by taking actions that are ethical and reasonable to create shared accountability amongst stakeholders.

Collaboration & Expectation – We value the input and contribution of all stakeholders and work collaboratively to exceed expectations.

Communication & Public Responsibility – We communicate through clear and concise methods to engage the public and accelerate our work.

Career & Technical Education Theory of Action

If students participate in Career & Technical Education programs that are driven by the economy, developed in partnership with relevant stakeholders, and connect academic and career success measures…

then students will engage in learning to master academic, technical, and career skills that prepare them for high school graduation, continuing education, and competitive employment in high-skill, high-wage, high-demand careers.

SECTION I - INTRODUCTION

The Delaware Department of Education (the Department), Teaching and Learning Branch has defined a model of career preparation that includes a state-led effort in Career and Technical Education (CTE) and the development of statewide pathways for students in charter, comprehensive, and technical school districts. Each pathway seamlessly aligns academic and technical courses to meet the prerequisite expectations of business and industry and ensures that every child has the opportunity to continue their education and seek career success. This work is guided by three key principles and the belief that career pathways are:

1. **Organized under the career cluster framework and are designed to prepare students for career success and continuing education;**

   The terms "career ready" and "college ready" are synonymous. In order to earn a livable wage in today's economy all students must possess a credential beyond a high school diploma and be prepared to continue their education in the form of two- and/or four-year college, certification programs, apprenticeships, formal job training, and/or military service. As a result, the body of knowledge required to be successful in a career is organized under the career cluster framework. Career clusters represent a segment of the economy and define the related technical and academic skills required for career success and the development of career pathways. Pathways help to align academic and technical knowledge at the secondary and post-secondary levels by creating multiple entry and exit points for students to pursue a career and continue their education. Programs of study provide a structure at the secondary level to align academic courses with CTE programs to define course sequencing and create a rigorous and relevant framework for instruction. In short, the framework provides an architecture to design a career preparation system and provide every student with the opportunity to investigate and pursue a meaningful career.

2. **Developed in partnership with relevant stakeholders, provide students with early career and early college experiences, and are driven by workforce needs;**

   Local Education Agencies (LEA) work closely with a CTE local advisory board to continuously improve their local system of career and technical education. These committees engage students, parents, teachers, post-secondary partners, and representatives from business. Responsibilities include the development, implementation, and evaluation of high-quality CTE pathways.

   Building upon this practice, the Department has formed state advisory boards for each career cluster to guide a state-led model of CTE. Cluster advisory boards are charged to help the Department develop, implement, and evaluate state-model CTE programs of study. Each state-model CTE program of study reflects the economic development needs of Delaware, is developed in consultation with representatives from business and institutions of higher education, and is made available to local education agencies for adoption. Further, each program of study outlines a technical and academic sequence of courses that lead to the attainment of an industry recognized credential and early college credit while promoting work-based learning experiences that familiarize students to the culture of work.

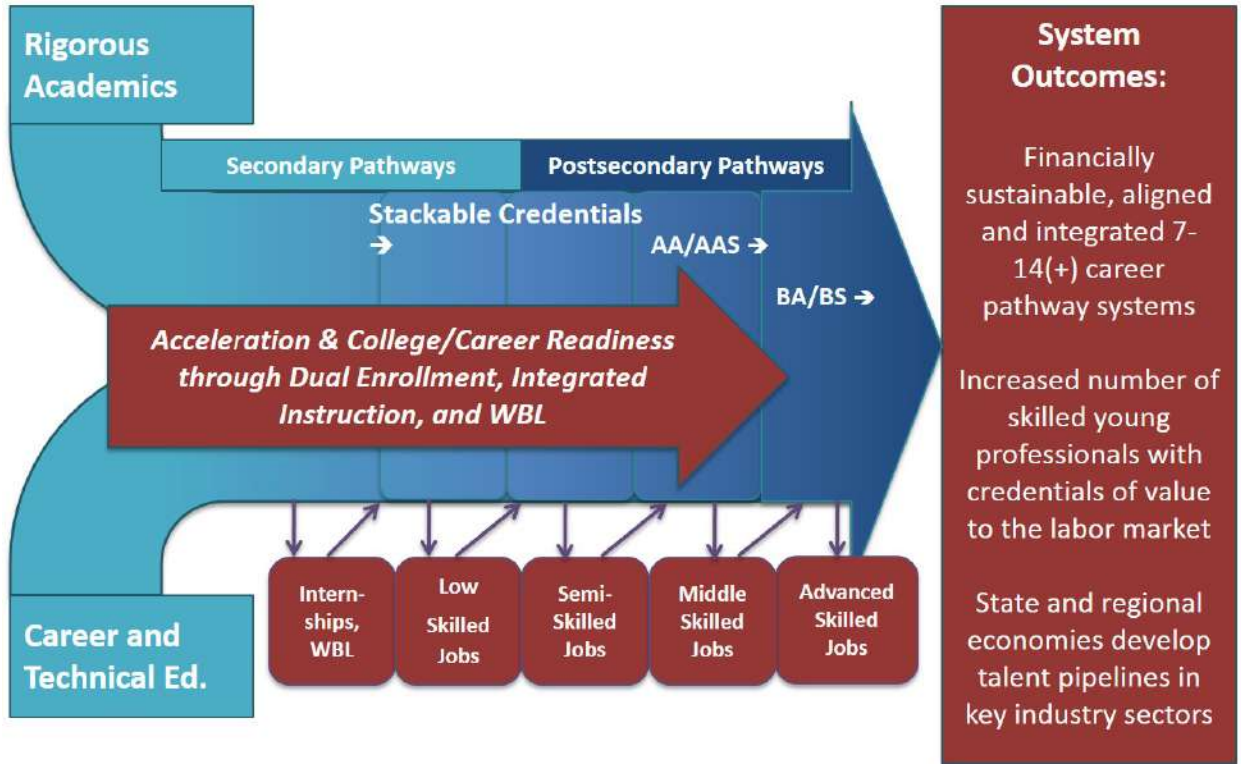
SECTION I - INTRODUCTION

3. Data-driven, connect academic and career success measures, and improve student achievement by providing a relevant framework for the application of knowledge.

Pathways and programs of study measure student achievement in academic and technical areas and promote employability skills. They produce higher levels of student achievement by defining a rigorous technical and academic course sequence that relates to the student's career aspirations and student success plan. Further, pathways provide a context for students to apply knowledge and career ready practices through project and problem-based learning that is authentic and reflects real-world application.

Student achievement is measured in the following areas: academic achievement, program completion, high school completion, industry certification, transition to a career or continuing education, and attainment of a formal post-secondary degree, certification, or licensure. Programs of study also measure and encourage equity and access for all students to seek competitive employment in a field of his/her choosing. The Department and local education agencies collect and use these data to drive a process of continuous program improvement, including making decisions regarding the viability of existing programs. State and local outcome data serve as a means of benchmarking program performance and closing achievement gaps. These measures ensure the Department's expectation that all children become career and college ready and every student has the opportunity to pursue high-skill, high-wage, and high-demand careers.

Career Pathway Model



Source: Pathways to Prosperity, Jobs for the Future, 2014

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Career Cluster Framework

The National Career Clusters® Framework (see Appendix A) defines the hierarchy of developing secondary and post-secondary programs that lead to meaningful careers. The framework groups similar careers into sixteen (16) related areas or *career clusters*. Each cluster represents a segment of the economy by defining the career opportunities in that area and the related technical and academic skills required for success. These expectations help states and institutions of higher education to develop *career pathways* or aligned sequences of courses that bridge secondary and post-secondary instruction. Once aligned, states and local education agencies develop *programs of study* at the secondary level to help students discover their career interests and choose an educational path that leads to success in high school and helps the student transition into continuing education and a career. In Delaware, programs of study are the foundation for creating the *student success plan* (SSP) and building the technical and academic course sequence necessary for every student to be career and college ready.

The career cluster framework helps the Department to support local education agencies, organize curriculum, provide professional development, and create opportunities for students. The career cluster framework helps local education agencies adopt and develop programs of study that are aligned with their local community and the needs of the school system. Further, the framework helps schools select and offer early career and early college opportunities that reflect the culture of the building. Pathways and programs of study help students transition from secondary instruction to continuing education and career success by: blending rigorous academic and technical preparation; providing career counseling and academic support; embedding work-based learning opportunities; creating opportunities to pursue informal instruction; applying the career ready practices in the classroom and in formal business settings; and providing clear supports for students during times of transition. The Department is committed to assisting local education agencies with the implementation of career pathways and programs of study that contribute to Delaware's economic development efforts and are in alignment with the state's workforce needs.

Career Clusters are broad occupational groupings and define a set of common knowledge and skills required to be successful in a career area. Delaware has adopted the National Career Clusters Model which makes instruction relevant by

connecting academic, technical, and employability skills to an instructional framework that is industry-focused, student-centered, and performance-driven. Delaware CTE programs of study are structured within sixteen (16) career clusters and are designed to provide students with multiple career pathways leading to employment and continuing education.

Career Clusters:

- Provide a framework for the Department and local education agencies to engage employers and work cooperatively to build career pathways and programs of study that reflect the needs of the state and local economy; and
- Ensure CTE programs remain up-to-date, are high-quality, and seamlessly align educational experiences at the secondary and post-secondary levels with the prerequisite expectations of Delaware employers.

Career Pathways are a sub-grouping of careers and are used as an organizing tool for developing curriculum, assessments, and instructional supports. Similar to career clusters, career pathways are grouped based on a set of core knowledge and skills needed for career success. Each pathway is intended to highlight a specific career area within the cluster. CTE career pathways are structured within the career clusters framework and are associated with state and local programs of study.

Delaware requires that all students complete a career pathway, or three credits of planned and sequential coursework designed to develop knowledge and skills in a particular career or academic area [14 Del.C. §505] (see Appendix A). Career pathways align the career interests of the student to high quality technical and academic preparation at the secondary level.

Career Pathways:

- Provide a framework for the Department and local education agencies to invest in CTE program start-up and sustainability as well as create a model of shared accountability and continuous program improvement;
- Provide a framework to invest in professional development for teachers, school counselors, school administrators, and additional staff;
- Create high expectations for all students and define systems that provide a comprehensive snapshot of student and school system progress;
- Allow all students to pursue high-skill, high-demand, and high-wage careers; and
- Highlight the relationship between continuing education and career opportunities.

Programs of Study are comprehensive Career and Technical Education (CTE) programs that deliver technical and academic education to prepare all students for career success and continuing education. Defined by state, district, school, business, and community partnerships, programs of study include a sequence of technical and academic coursework as well as opportunities to obtain industry recognized credentials and early college credit. Programs of study also provide opportunities for students to participate in work-based learning opportunities, service learning, and other leadership experiences including Career and Technical Student Organizations (CTSO). Programs of study are designed to prepare students for career success and a seamless transition into post-secondary education.

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The Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins) calls upon states to create a sequence for academic and technical coursework to help students attain a post-secondary degree or industry recognized certificate or credential, otherwise known as a program of study (POS).

Programs of Study:

- Incorporate and align secondary and post-secondary education elements;
- Embed technical and academic content in a coordinated, non-duplicative progression of courses;
- Provide opportunities for secondary students to acquire post-secondary credit(s); and
- Lead to an industry recognized credential or certificate which holds value at the professional level, post-secondary level, or in an associate or baccalaureate degree program.

Student Success Plans encompass a minimum of six years (8th through 12th grade and one-year beyond high school) and provide students with an opportunity to set career and post-secondary goals based on their academic and career interests [14 Del.C. §505] (see Appendix A). These plans align to rigorous and relevant programs of study which prepare students for continuing education and career success.

The student success plan is reflective of the program of study and represents a fluid, yet sequential plan that is benchmarked to the interests, needs, as well as the education and career goals of the student. The plan goes beyond the school experience by connecting students with the larger community and is guided by an advisement process that includes school staff, parents or guardians/caregivers, and when available career coaches or mentors. Delaware student success plans are reflective of Delaware's programs of study which build on well-defined career pathways within the career clusters framework.

Student Success Plans:

- Provide an individualized, flexible, student-driven plan;
- Begin in 8th grade and continue through and beyond the last year of high school;
- Establish an adult support team which includes the parent/guardian and school staff serving as advisors (teachers, counselors, administrators and other school staff);
- Help students achieve post-secondary education and career goals;
- Provide student support in setting goals for personal and academic growth;
- Provide a vehicle for the integration and demonstration of 21st century skills and the career ready practices;
- Use a career guidance system for efficiency and portability; and
- Help students stay connected and on-track while in high school.

SECTION II – DEVELOPMENT, IMPLEMENTATION, AND CONTINUOUS IMPROVEMENT

Program of Study Approval and Evaluation Overview

Local Education Agencies (LEA) seeking approval for a Career and Technical Education (CTE) program of study will submit an application using the process outlined in Section III of this document – *Program of Study Application Procedures*. Requests may be submitting for the following:

1. Adoption of a Delaware state-model CTE program of study; or
2. Development of a local CTE program of study.

The LEA shall employ a system-wide approach to develop and implement CTE programs in emerging industry sectors and eliminate programs that are underperforming. This work will be done in conjunction with an industry specific program advisory committee that is charged to review potential career pathways and establish state and local CTE program offerings. To adopt a state-model CTE program or design a local program of study the advisory committee will use local, state, and regional labor market data to assess the related employment needs and begin the process of adoption or development. For existing programs, the advisory committee will assess the performance of a CTE program and identify appropriate next steps to ensure the program reflects core functions of the industry sector as well as current and future workforce development needs. This will include the transition to a state-model CTE program or the elimination of CTE programs when they are no longer relevant to the industry sector or if the program is underperforming. Minutes of the program advisory meetings must be recorded and reflective of decisions made by committee members.

Leaders at the LEA level are encouraged to contact the Department CTE & STEM Policy Advisor (see Appendix B) for technical assistance should the LEA wish to adopt a state-model program of study or develop a local program of study. In both instances the Department will commit a subject matter expert to provide technical assistance to the LEA as needed. All applications for state or local programs of study will be approved by the Department of Education. All programs will be monitored on a five-year cycle to ensure continuous program improvement.

Adopting a State-Model Program of Study

Delaware programs of study are developed in conjunction with representatives from business and industry, secondary and post-secondary educators, and community stakeholders. A current list of state-model CTE programs of study (see Appendix A) is available online. When a LEA successfully applies for and adopts a Delaware state-model program of study, all program requirements must be adhered to without modification; however, LEAs are encouraged to continuously improve the instructional model and identify best practices to meet the unique needs of the local community and students that are served. These best practices will be documented, showcased, and shared through models of peer collaboration. The *Delaware Program of Study Proposal* is located in Section III of this document and a draft proposal is available for all state-model CTE programs of study (see Appendix A) on the Department Website. The formal proposal will need to be completed by the LEA and submitted for program approval to the Department. The Department CTE & STEM Education Associates (see Appendix B) will provide leadership and technical assistance to LEAs to successfully adopt, deliver, and continuously improve state-model programs of study.

SECTION II – DEVELOPMENT, IMPLEMENTATION, AND CONTINUOUS IMPROVEMENT

Transitioning to a State-Model Program of Study

When transitioning a previously approved CTE pathway to a state-model program of study, the LEA will convene an industry specific program advisory committee to review the existing program and the state-model program to determine the need for transition and build an appropriate plan of work.

The transition plan should include:

- How the existing program will be phased out without negatively impacting students;
- How the new program will be implemented; and
- The process for continuous program improvement.

Decisions regarding the need for and plans to transition to a state-model program of study should be reflected in the minutes of the program advisory committee meetings. The LEA should make the local community aware of the discussion and build community support for the transition. Further, the LEA must work with secondary teachers, school counselors, and school administrators to inform them of the program transition and work to identify potential student enrollment. Communication with all relevant stakeholders is essential to transition from a previously approved pathway to a state-model program of study. The LEA is encouraged to work purposefully and include input from a variety of stakeholders to support the transition. The Delaware CTE & STEM Office is committed to supporting the LEA's adoption and successful implementation of state-model programs of study. Technical assistance will be provided by the Department CTE & STEM Education Associates (see Appendix B) and will be customized to reflect the needs of the LEA throughout the transition.

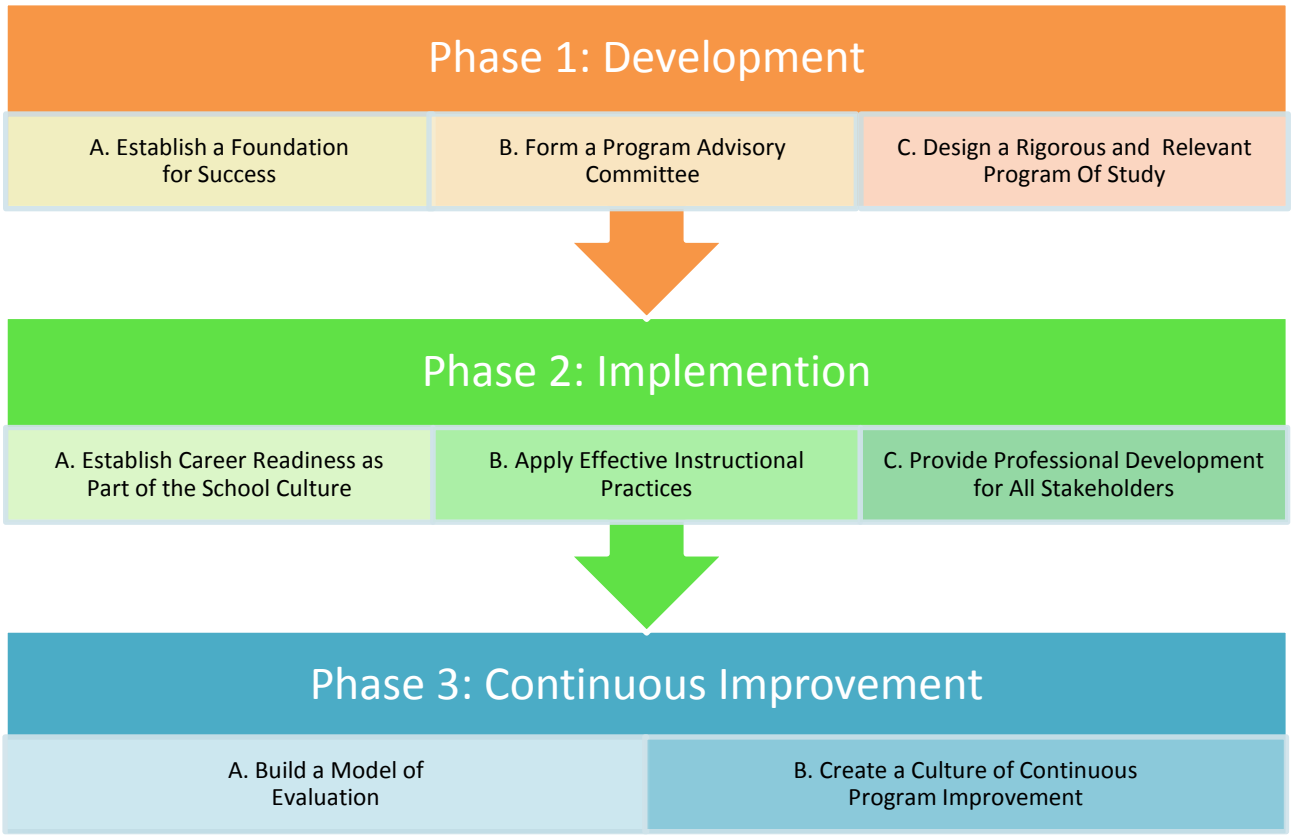
Developing a Local Program of Study

The LEA will typically adopt or transition to an existing state-model program of study; however, when a local program advisory committee recommends implementing a new program of study that has not been developed at the state level, the Department CTE & STEM Office will provide technical assistance to develop and implement the instructional model as needed. Evaluation will be conducted within the five-year program review cycle.

The process for developing a local program of study is a collaborative practice that results in the submission of a *Delaware Program of Study Proposal* for state approval. The three phases of program development apply to all state-model programs of study and should be reflected as local programs are developed. The steps for the development, implementation, and continuous improvement of both state-model and locally developed programs of study are outlined below, depicted in the following chart, and detailed in the following section. If the LEA would like technical assistance to begin the process or facilitate transition between phases, please contact the Department CTE & STEM Policy Advisor (see Appendix B).

- **Development** (*Establish a Foundation of Success*, *Form a Program Advisory Committee*, and *Design a Rigorous and Relevant Program of Study*);
- **Implementation** (*Establish Career Readiness as Part of the School Culture*, *Apply Effective Instructional Practices*, and *Provide Professional Development for All Stakeholders*); and
- **Continuous Improvement** (*Build a Model of Evaluation* and *Create A Culture of Continuous Program Improvement*).

PROGRAM OF STUDY
DEVELOPMENT, IMPLEMENTATION, AND CONTINUOUS IMPROVEMENT



PHASE 1: DEVELOPMENT

A successful program of study begins with a vision and a succinct plan for implementation. The Department recommends using the *Delaware Program of Study Proposal* as a template to document work. When the development phase is complete this work can be submitted for state approval.

A. Establish a Foundation for Success

A strong foundation is essential to effectively develop, implement, and continuously improve a program of study. LEAs should participate in the following action steps prior to engaging a program advisory committee.

1. <u>Collect, review, and analyze local, state, and regional labor market data:</u>
   Local, state, and regional labor market data provide information to improve the relationship between secondary programs of study, continuing education, and high skill, high demand, high wage careers. LEAs should analyze local, state, and regional labor data to determine career clusters and pathways for consideration. While CTE programs must focus on economic development trends, it is equally important that LEA staff discuss the local vision for CTE and build opportunities for programs that reflect the culture of the LEA, the school building, and the community they serve.

Resources for obtaining current labor market data are available through the following links (see Appendix A):

- Delaware Department of Labor – 10-year occupation and industry projections at the state and county levels;
- Delaware 2022 Occupation and Industry Projections – provides a copy of the latest print version of the projections including a section on occupations by Career Cluster; and
- Economic Development and Employer Planning System (EDEPS) – uses Bureau of Labor Statistics data to provide national, state, and regional data for occupations, industries, and career clusters. Using the "Unit of Analysis" selections, both demand and supply (postsecondary completion) data can be obtained for most occupational areas.

2. Draft an implementation plan, identify needs, and resources:
   Once labor market data have been analyzed and the need to develop a local program of study established, the LEA should develop a plan to design the program of study. The draft implementation plan should include an outline of the CTE program course sequence, technical knowledge and skills, potential frameworks for curriculum and assessment development, a timeline for implementation, a plan for sustainability, and a model of evaluation. Additionally, the LEA should begin identifying training needs for instructional staff, school counselors, and school administrators as well as budgetary needs and potential funding sources. The LEA should also identify an instructional space. Throughout the planning process, the LEA should document how it plans to engage the program advisory committee and what technical assistance is needed to successfully implement the instructional model.

3. Prepare to meet with the program advisory committee:
   While having the correct people on a program advisory committee is essential to the planning phase, building a communication plan and process to engage stakeholders is equally important. Prior to convening the program advisory committee, the LEA should craft a clear outline of the committee purpose, roles, and responsibilities, along with a meeting schedule and potential agenda items for each interaction. This work will inform how the advisory committee is staffed and what stakeholder groups are represented. As the LEA progresses from a draft implementation plan to finalizing the *Delaware Program of Study Proposal* and then submitting the application for state approval, the program advisory committee should be engaged and supportive.

The Delaware Department of Education CTE & STEM Education Associates are available to assist LEAs in identifying and analyzing labor market data, identifying state and national resources for local program development, and planning for program advisory committee engagement. If the LEA would like technical assistance please contact the CTE & STEM Policy Advisor (see Appendix B).

B. Form a Program Advisory Committee

Once a strong foundation has been established and the LEA is at a point where external feedback is required, the LEA must convene a program advisory committee. These action steps will ensure that the program advisory committee helps to design, implement, and support the program of study.

1. Staff the program advisory committee:
   Representatives on the program advisory committee should include, but are not limited to: CTE and academic teachers, CTE/curriculum district coordinators, school counselors, business and industry representatives, labor representatives, post-secondary partners, parents, and students. The group should be reflective of the community and account for broad stakeholder engagement.

2. Acclimate the program advisory committee:
   The program advisory committee should be aware of the draft implementation plan, labor market analysis, and policies and/or procedures within the school system or partnering institutions which might accelerate or delay the implementation of the program. This can include access to early college (articulation, dual enrollment, advanced standing) and/or early career (work-based learning, internships, cooperative education, apprenticeship) opportunities for students. These efforts should be considered in the early stages of program development to assure that every student can seamlessly transition to high-skill, high-demand, and high-wage employment. Potential barriers can be overcome by ensuring that secondary, post-secondary, and business and industry partners work together to design and implement the proposed program of study.

3. Understand that the role of the program advisory committee will change:
   The role of the program advisory committee and their work will change as the LEA moves through the development, implementation, and continuous improvement phases. The LEA should develop a charge that is specific to the immediate needs of the LEA. The charge should be revisited annually or more frequently based on the continued needs of the LEA, the school, the teacher(s), or the students. As the advisory committee evolves, build observable and measureable outcomes, celebrate success, and continue to create early college and early career opportunities for every student.

C. Design a Rigorous and Relevant Program of Study:

Delaware CTE programs of study are comprehensive pathways for delivering academic and career technical education that prepare all students for career success and continuing education. Programs must include a sequence of academic and technical coursework as well as opportunities to obtain industry recognized credentials and early college credit. Programs of study also provide opportunities for students to participate in work-based learning opportunities, service learning, and other leadership experiences including Career and Technical Student Organizations (CTSO) that extend beyond the school day or instructional program. When building a program of study the LEA must consider the following:

1. Review the career cluster framework to identify the appropriate cluster and pathway:
   The program advisory committee members should be knowledgeable of the career cluster framework, pathways, and program of study structure and design. Career clusters provide an instructional framework to offer industry-focused, student-centered, and performance-driven learning. Students should be exposed to a broad set of skills that are transferable within the industry

sector or career cluster, while also acquiring more specific workplace skills and knowledge through the identified career pathway. Further, by identifying the appropriate career cluster and pathway, the LEA is defining how program and course data will be collected and reported, how the instructional model fits within the LEA and state system of CTE, and what types of related workforce and/or labor market data will be used to inform program development and improvement.

2. Develop a plan for the instructional space:
   The size, shape, and arrangement of a facility, as well as location of passageways, storage, and work areas are important factors in establishing a safe working environment. To assure safety and quality education, the number of students that can be safely placed in a CTE program will vary based on the program requirements and activities. Student enrollment and the number of students to be placed in the instructional space should be discussed early in the planning phase. A draft of the facilities design (that includes areas needed for classwork, skill development with required equipment, and use of technology) should be made available to assure proper program operation, equal access, and safety for all students. All CTE programs must adhere to the guidelines set forth in Delaware's *Safety First: Safe Instructional Practices in the Classroom and Laboratory* (see Appendix A).

3. Identify academic and technical skill standards:
   The program advisory committee should review the academic, technical, and workplace skills and knowledge required for entry into a related post-secondary program and career field. It is critical that post-secondary educators and business stakeholders are included in the process to clarify the knowledge and skill proficiencies that all students will master in the program of study. Additionally, the committee will review the technical skill standards most closely aligned with the CTE program to ensure relevance and accuracy. These standards will serve as the foundation for curriculum and assessment development and the identification of appropriate instructional strategies.

4. Identify early career opportunities, early college options, and technical skill attainment:
   Approved CTE programs of study provide all students with the opportunity to participate in early career opportunities and earn post-secondary credit while still in high school. Options for participation in early career opportunities must be outlined within the program of study. These experiences may include, but are not limited to, supervised work-based learning activities such as experiential education, job shadowing, cooperative education or internships, and/or industry-mentored projects. Each activity should be designed to enrich and advance school-based instruction and provide students with the opportunity to demonstrate career readiness. Where available and appropriate, CTE programs of study shall offer students the opportunity to earn industry-recognized certifications or licenses to demonstrate career readiness and provide students with a credential to seek competitive employment. Options for early college credit including advanced placement, dual enrollment, transcripted and/or articulated credit, and pre-apprenticeship, must be outlined within the program of study. In developing CTE program sequences, secondary and post-secondary educators should also identify opportunities for students to pursue two- and four-year degrees and certification programs. Technical skill attainment is a measure of technical knowledge and skill proficiency developed during the program of study and leads to an industry recognized credential or certificate which holds value at the professional level, post-secondary level, or in an associate or baccalaureate degree

program. Both industry certifications or licensures and early college credit are considered measures of technical skill attainment. A copy of all articulation agreements should be submitted and the measures for technical skill attainment must be identified within the program application.

5. Develop program and course descriptions as well as end-of-program and end-of-course assessments:
   Based on the program advisory committee recommendations, administrators and teachers will develop a program overview that broadly describes the program and expectations placed upon students. This overview should describe prerequisite requirements as well as knowledge and skills students will acquire in the program. This overview will also serve as a marketing tool for students, parents, and school counselors. The program advisory committee should also identify the most appropriate end-of-program assessment(s) to document student achievement which may include industry recognized licensure or certification. In addition, administrators and teachers will develop course descriptions and consult with the program advisory committee to identify appropriate end-of-course assessments which will serve as benchmarks for student learning. These benchmarks or culminating experiences help to document student attainment of knowledge and skills identified for each course. Additional assessments may include projects, written and performance-based exams, or assessments leading to industry recognized credentials and licensures.

6. Develop curriculum that includes both technical and academic content:
   Secondary and post-secondary academic and CTE teachers will develop the curriculum and course sequences for the purpose of both vertical and horizontal curriculum alignment. Vertical alignment builds upon pre-existing knowledge from one grade level to the next, transitioning from middle school to high school, to post-secondary courses, and the workforce. This alignment should include determining where each specific knowledge and skill will be incorporated in the individual course sequence. Horizontal alignment refers to teaching certain knowledge and skills at the same grade level of related content in other subject areas. This includes content from academic as well as CTE coursework. Curriculum can be adopted, adapted, or developed in accordance with guidance from the program advisory committee. Curriculum should be based on the most relevant academic (Common Core State Standards and Next Generation Science Standards), technical, and employability standards available and should encourage innovative teaching and learning methods that includes the use of technology, inquiry and problem-based approaches, higher-order thinking skills, and competency-based learning.

7. Identify value-added opportunities for students:
   All CTE programs of study provide students with the opportunity to participate in early career opportunities and earn post-secondary credit while enrolled in the program. As a result, students demonstrate technical skill attainment through an industry recognized certification (including state licenses/certifications) and early college credit that can be applied to a post-secondary degree, certificate, or apprenticeship program. While this baseline expectation is consistent across all CTE programs, the opportunity to extend and accelerate learning must be established. This includes building opportunities for students to engage employers and continue their education that extend

beyond the CTE program. Typically, these opportunities will take place during the student's senior year and will reflect post-secondary goals in the form of related dual enrollment and AP coursework as well as career aspirations in the form of cooperative learning experiences and structured internships. While not all CTE students will take advantage of these opportunities, transition services and options to extend early college and early career experiences should be planned for and documented in the program application. Students should be encouraged to participate in these opportunities through the student success plan (SSP) and measures to track student participation and success should be developed and used to inform program improvement.

8. Identify related Career and Technical Student Organizations (CTSOs):
   Through co-curricular CTSOs, students have opportunities to participate in career development experiences, demonstrate and further refine their technical skills, and exhibit leadership. The program advisory committee is a valuable resource for supporting student organization activities through participation at both the local and state levels. Students enrolled in CTE programs are encouraged to participate in CTSOs or other professional associations or organizations as identified by the program of study. Measures to track student participation and success should be developed and used to inform program improvement.

9. Complete the program of study matrix:
   The program matrix (see Appendix A) defines a planned, sequential program that aligns academic subjects with the CTE program of study including a capstone or culminating experience such as an industry-mentored project and/or work-based learning experience. The appropriate CTSO affiliation, industry certification and licensure options, as well as opportunities for early college credit should also be identified. A list of potential career options and related post-secondary education requirements should be available for students to determine their pathway for continuing education and career success.

10. Design an evaluation plan that promotes continuous program improvement:
    The program advisory committee and school system will partner to design and administer an evaluation plan to continuously improve the program of study. This includes collecting relevant data which is essential to determine success of the program of study. Data should be disaggregated and analyzed at the school and/or program level and used to inform programmatic decisions. Data from secondary, post-secondary, and employer stakeholders must be included in the overall evaluation plan. All state and locally developed programs will be monitored on a five-year cycle to ensure continuous program improvement.

Once the planning phase is complete and the related information is included in the *Delaware Program of Study Proposal* template, the document will be submitted to the Department for approval. If the LEA would like technical assistance please contact the CTE & STEM Policy Advisor (see Appendix B).

SECTION II – DEVELOPMENT, IMPLEMENTATION, AND CONTINUOUS IMPROVEMENT

PHASE 2: IMPLEMENTATION

The culture of the LEA, the school building, and the community should be reflected in the program of study. Instruction should be interactive and highly engaging as well as promote the opportunity for students to apply knowledge, develop career ready practices, and engage in work that is authentic. Further, CTE programs are designed to serve all students and help every child seek early college and early career experiences. Professional development should be provided to each teacher that is specific to the program content and related pedagogy. Additionally, professional development should be provided for school counselors and school administrators to better understand CTE programs and the related instructional model.

A. Establish Career Readiness as Part of the School Culture:

Once a program of study is designed, verified by all stakeholders, and approved by the Department, the next step is aligning the program to existing school practices and identifying potential students. In order for CTE programs to be successful, high expectations need to be placed on the school-based staff to provide academic, technical, and workplace skills to all students regardless of gender, race, national origin, or socio-economic status. In addition, there needs to be a model of support for academic and career counseling. This work should be a reflection of the students' career aspirations and should be supported by both the instructional staff and school counseling office. School administrators will need to work with both the instructional staff and school counseling office to ensure that course scheduling matrices do not eliminate any potential student enrollment and also ensure that students can move through the CTE program at an accelerated pace. Additional support must also be provided by the community and program advisory committee.

CTE programs of study are designed for students of all genders and backgrounds and are a critical component of career and college readiness. Aligning this expectation to the school culture is essential for program success. Teachers are encouraged to work with school counselors and administrators to review program level data and ensure that all students have access to early college and early career experiences. The Perkins Core Indicators of Performance can help to serve as a baseline for program excellence. Supporting data collected at the LEA or school level may also be analyzed to inform instruction and programmatic decisions. This work should be tied to the program evaluation model and building a culture of continuous program improvement.

School staff should work together to provide career and academic counseling that reflects the needs of all children. CTE programs of study should be an integral part of each child's student success plan (SSP); a requirement for Delaware students grades 8-12 [14 Del.C. §505] (see Appendix A). The SSP reflects the academic and career interests of students and defines a program of study based on the academic courses, early college credit, work-based learning experiences, and extracurricular opportunities needed to prepare students for entry into the workforce and post-secondary education. The SSP integrates the program of study into the school culture and represents a fluid, yet sequential plan based on a unique set of interests, needs, education, career goals, as well as graduation requirements for each student. Further, the plan goes beyond the school experience by connecting students with the larger community and is guided by an advisement process that includes not only school counselors, but school staff and parents or guardians/caregivers. Work-based learning experiences are an integral part of the program

of study and should also be reflected through the SSP process. As appropriate, program advisory committee members can participate in the SSP process to help identify related work-based learning opportunities and to provide career coaching.

By establishing rigorous and relevant CTE programs of study, LEAs are providing every student with the opportunity to succeed. When academic, technical, and workplace skills are developed in an authentic learning environment, students experience learning in a highly interactive and authentic environment. Access to high quality CTE programs must be assured for all students through an educational system that aligns programs, curricula, and instructional services across disciplines. CTE programs of study should be an integral part of every student's success plan to ensure that they graduate from high school prepared for post-secondary education and high skill, high demand, high wage careers.

B. Apply Effective Instructional Practices:

The teacher is the single most important factor in student achievement. For teachers to be effective they must continually expand their knowledge and skills to implement educational best practices that exemplify both rigor and relevance. Rigor is inserted into the curriculum by creating opportunities for students to apply content and problem-solving skills through integration and active learning. Relevance reflects opportunities for communication and teamwork as well as project-based instruction that focus on real-world issues.

Instruction should be specific to the grade level and provide the building blocks for student achievement. Aligning CTE curriculum to the Common Core State Standards and Next Generation Science Standards will engage and prompt students to transfer and connect ideas and concepts across disciplines. Further, effective instructional practices include differentiating instruction to meet the needs of the individual student and provide active learning opportunities for students to internalize career-ready practices and the development of skill specific tasks.

Career and Technical Student Organizations (CTSOs) play an important part in preparing students to become productive citizens and to assume roles of leadership in their communities. These organizations provide a unique program that connects career and leadership development, motivation, and recognition. CTSOs connect curricular and co-curricular experiences and promote a growth mindset. Students who possess a growth mindset show greater motivation in school, receive better grades, and are more likely to succeed. When effective instructional practices are coupled with a growth mindset, students become enthusiastic and persistent learners who take charge of their own success. When both students and educators have a growth mindset, they understand that intelligence can be developed.

C. Provide Professional Development to All Stakeholders:

In order to be effective, teachers need to be engaged in high quality and on-going professional development. Professional learning for educators must include opportunities to work with business and industry partners as well as post-secondary partners to expand and reinforce content and pedagogy. Professional learning for school administrators and school counselors should also be developed to reflect the needs of the CTE program and the program advisory committee.

SECTION II – DEVELOPMENT, IMPLEMENTATION, AND CONTINUOUS IMPROVEMENT

Learning Forward, formerly known as the National Staff Development Council has adopted Standards for Professional Learning that connects professional learning to student achievement. The standards acknowledge that all educators have a professional responsibility to learn and grow to better assist students. The Standards for Professional Learning have been adopted as Delaware's Professional Development Standards, [14 Del.C. §1598] (see Appendix A). These standards serve as the foundation for professional development for all Delaware educators and as indicators that guide the facilitation, implementation, and evaluation of professional learning. The standards make explicit that the purpose of professional learning for educators is to develop the knowledge, skills, practices, and dispositions they need to help students perform at higher levels. These standards should be taken into consideration when building and evaluating professional learning opportunities for CTE programs.

A direct relationship exists between professional learning and student achievement. When professional learning is standards-based, it has a greater potential to change what educators know, are able to do, and believe. When educators' knowledge, skills, and dispositions change, they have a broader collection of effective strategies to use and apply to meet performance expectations and student learning needs. When educator practice improves, students have a greater likelihood of achieving results.

Statewide professional development opportunities are essential for all Delaware CTE educators to further develop the knowledge, skills, and instructional practices needed to improve student performance. The Department is committed to growing the professional capacity of CTE teachers, school counselors, and LEA administrators by investing in and providing resources for high quality, program and course specific professional learning as well as targeted training for school administrators and counselors.

The Department Education Associates are available to assist LEAs in working to establish career readiness as part of a school culture, supporting teachers and administrators, as well as helping to build professional learning models. If the LEA would like technical assistance please contact the CTE and STEM Policy Advisor (see Appendix B).

SECTION II – DEVELOPMENT, IMPLEMENTATION, AND CONTINUOUS IMPROVEMENT

PHASE 3: CONTINUOUS IMPROVEMENT

An effective program of study is centered on a model of evaluation that creates opportunities for all stakeholders to engage in the process of continuous program improvement. Program evaluation should be conducted on a semi-annual or annual basis and focus on defined metrics with established targets through the five year program improvement cycle.

A. Build a Model of Evaluation

The program advisory committee should be involved in the design of a program evaluation and accountability plan. This plan should be designed with the end-in-mind and focus on the elements that accelerate student achievement within the program of study model. Further, this plan should be student-centered and focus on creating efficient practices that lead students to high skill, high demand, high wage career opportunities through early college and early career experiences.

This model should at a minimum define the required data elements for program improvement, a timeline for each evaluation activity, the individuals responsible for collecting/analyzing the data, checkpoints where the program of study team will review and reflect on the data, and a feedback loop that promotes continuous program improvement. LEA staff are encouraged to move beyond values required for base compliance and to identify measures that reflect additional student needs.

The following elements are reflective of the Department's priorities for CTE and should be included in the LEAs plan for the evaluation of CTE programs:

1. All local education agency CTE programs include Delaware CTE Programs of Study and program quality is ensured by an active Local Advisory Committee;
2. CTE programs add value (industry assessments and articulations add value to CTE programs) and support transition to continuing education and careers;
3. All students have access to career development programs and services as well as support for successful transition from middle to high school and to continuing education;
4. Collaboration occurs between school counselors, academic teachers, and other CTE teachers to place students in appropriate CTE programs, ensure their success, and enhance project-based learning. Professional development opportunities exist for new and experienced CTE teachers and are available either locally or statewide;
5. Program improvement is informed by accurate data collection and comprehensive data analysis (system & program); and
6. Effective grant and fiscal management.

B. Create a Culture of Continuous Program Improvement:

The Department is committed to building a model of shared accountability and success by supporting state-model CTE programs of study and locally developed programs of study. Program innovation will be incentivized through state and federal funding streams and a commitment from the Department to provide timely technical assistance and quality professional learning opportunities.

SECTION II – DEVELOPMENT, IMPLEMENTATION, AND CONTINUOUS IMPROVEMENT

Five year plans for program implementation, evaluation, and continuous improvement should be developed and monitored by the LEA and the program advisory committee. Evaluation and accountability data should be shared with all stakeholders. Further, data should be analyzed to determine what changes or improvements are needed in the design and/or implementation of the program of study. Data should also be used to inform next steps related to program improvement and professional development opportunities. A cycle of continuous improvement should be established by the committee that reflects the needs of the LEA, the school, the teacher(s), the students, and the community. The team should be aggressive in defining program metrics and performance targets as well as when those targets will be measured throughout the five year plan.

The Department Education Associates are available to assist LEAs in building a model of evaluation. If the LEA would like technical assistance please contact the CTE and STEM Policy Advisor (see Appendix B).

CTE Policy and Procedures Summary:

The Delaware Department of Education is committed to assuring that every Delaware student is career and college ready. Career and Technical Education (CTE) helps our state meet the challenges of economic development, student achievement, and global competitiveness. CTE is developing America's most valuable resource—its people; helping them gain the skills, technical knowledge, academic foundation, and real-world experience they need to be prepared for high-skill, high-demand, high-wage careers. CTE is leading change, transforming expectations, and making a difference for students, for high schools and post-secondary institutions, and for business and industry.

SECTION III – PROGRAM OF STUDY APPLICATION PROCEDURES

Completing a Delaware Program of Study Proposal

Local Education Agencies (LEA) seeking approval for a Career and Technical Education (CTE) program of study will submit the *Delaware Program of Study Proposal* for the following:

1. Adoption of a Delaware state-model CTE program of study; or
2. Development of a local CTE program of study.

The Delaware Department of Education (the Department) CTE and STEM office will provide leadership and technical assistance to LEA representatives to develop and amend program proposals. The following procedures should be followed for submission:

1. Initial contact and technical assistance:
   The LEA leaders will contact the Department CTE Policy Advisor (see Appendix B) to begin the program development process. The CTE Policy Advisor will work with a subject matter expert to provide technical assistance to the LEA as needed.

2a. Adoption of a Delaware state-model CTE program of study:
   Copies of the Delaware CTE state-model programs of study (see Appendix A) are available through the Department website. These proposals are consistent with the required components of a locally developed CTE program of study and must be implemented without modification. The LEA will submit the state-model program of study proposal with the appropriate signatures and complete the following sections of the proposal:

   - Program Advisory Committee Members:
     Program of study (POS) representatives must include, but are not limited to: CTE and academic teachers, CTE/curriculum district coordinators, school counselors, business and industry representatives, labor representatives, and post-secondary partners. For more information, see section II, Form a Program Advisory Committee, (p. 10).

   - Value-added Opportunities:
     Describe extended early career and early college opportunities available during the student's senior year. Transition services, cooperative learning experiences, and additional dual enrollment options should be documented. For more information, see section II, *Identify Value-Added Opportunities for Students* (p. 13).

   - Program of Study Matrix:
     Update and attach the POS matrix to demonstrate the school's alignment of academic and technical courses, culminating in an early career and/or early college experience. Identify appropriate certification and licensure options, opportunities for obtaining early college credit (courses with articulated or dual enrollment credit agreements should be appropriately designated within the matrix), the post-secondary program sequence, and potential career options. For more information, see section II, *Complete the Program of Study Matrix* (p. 14).

SECTION III - PROGRAM OF STUDY APPLICATION PROCEDURES

2b. Development of a local CTE program of study:

The *Delaware Program of Study Proposal* template for locally developed programs of study begins on page 22 of this document. Each section reflects the requirements for CTE program of study approval which is described in detail in Section II (pages 9-19) of this document. The local application for program approval will need to include the necessary detail to effectively evaluate the program of study. The Department CTE and STEM office is available to provide guidance and technical assistance to develop local programs of study. LEA staff are encouraged to involve the Department throughout the process of program development and submission for approval. Incomplete applications or programs that do not adequately reflect the expectations for all CTE programs will not be approved.

3. Submitting the program of study proposal:

The *Delaware Program of Study Proposal* must be submitted with attachments and appropriate signatures by November 30 of the school year prior to program implementation to:

Luke Rhine, Director
CTE and STEM Office
Delaware Department of Education
401 Federal Street, Suite 256
Dover, DE 19901

Submitting a Proposal for Multiple High Schools

This section only applies to LEAs with multiple high schools. A single program of study proposal may be submitted by the LEA to implement a CTE program at multiple high schools. However, if the LEA chooses to submit a program of study proposal for multiple schools, the application must clearly delineate how the program will be implemented at each school site. This includes identifying early career and early college opportunities specific to each school. Please note that each school must independently demonstrate the expectations of program approval. If a single school does not demonstrate the established expectations or the program proposal does not include the required detail for each school, the approval process for all schools may be delayed.

Receiving Notification of Program Approval

Proposals will be evaluated through the CTE program approval process and LEAs will be notified of program status by December 15 of the school year prior to program implementation.

Delaware Department of Education
CTE & STEM Office
401 Federal Street, Suite 256
Dover, DE 19901
PHONE: 302.735.4015 FAX: 302.739.1780

DELAWARE CTE PROGRAM OF STUDY PROPOSAL

DISTRICT INFORMATION		
Local Education Agency (LEA):		
School(s) where the program of study will be located:		**Program of Study Start Date:**
LEA CTE Coordinator Name:	**Phone:**	**E-Mail Address:**
Career Cluster:	**CTE Program of Study Title:**	
CTE Pathway Course Sequence: 1. 2. 3.		
Program of Study Request: ☐ State-model CTE Program of Study ☐ Locally Developed CTE Program of Study		

ASSURANCES & SIGNATURES

Program of Study approval and funding is contingent upon compliance with the following assurances:

1. The LEA will comply with Delaware Administrative Code, 14 Del.C. §525, Requirements for Career and Technical Education Programs and the Delaware State Plan for the Carl D. Perkins Career and Technical Education Act of 2006;
2. The LEA will submit CTE program data as required by the Delaware Department of Education;
3. All teachers are certified in the Career and Technical Education areas in which they teach;
4. The LEA will convene and engage a program advisory committee for the purposes of program development, implementation, and continuous improvement;
5. All students have equal access to the program of study as well as early career/early college options;
6. Career and Technical Student Organizations are integral components of the program of study;
7. The LEA will maintain safe facilities and equipment aligned with the program of study goals; and
8. A process for continuous improvement has been established, which includes a model of evaluation and program improvement.

LEA CTE Coordinator Signature:	Date:
LEA Chief School Officer Signature:	Date:

PROGRAM ADVISORY COMMITTEE MEMBER INFORMATION	
Complete the list of program advisory committee members. Program of study (POS) representatives should include, but are not limited to: CTE and academic teachers, CTE/curriculum district coordinators, school counselors, business and industry representatives, labor representatives, and post-secondary partners. Community stakeholders including parents and students can also be considered.	
Name:	Title:
Affiliation:	
Address:	
Phone:	E-Mail:
Area of Expertise:	
Representing: ☐ Business/Industry ☐ Secondary Education ☐ Post-Secondary Education ☐ Community/Other	
Name:	Title:
Affiliation:	
Address:	
Phone:	E-Mail:
Area of Expertise:	
Representing: ☐ Business/Industry ☐ Secondary Education ☐ Post-Secondary Education ☐ Community/Other	
Name:	Title:
Affiliation:	
Address:	

Phone:	E-Mail:
Area of Expertise:	
Representing: ☐ Business/Industry ☐ Secondary Education ☐ Post-Secondary Education ☐ Community/Other	
Name:	Title:
Affiliation:	
Address:	
Phone:	E-Mail:
Area of Expertise:	
Representing: ☐ Business/Industry ☐ Secondary Education ☐ Post-Secondary Education ☐ Community/Other	
Name:	Title:
Affiliation:	
Address:	
Phone:	E-Mail:
Area of Expertise:	
Representing: ☐ Business/Industry ☐ Secondary Education ☐ Post-Secondary Education ☐ Community/Other	

LABOR MARKET DEMAND
Certify that a labor market needs analysis has been completed for the proposed program of study. Documented evidence should be provided, as needed.
☐ The LEA certifies that regional, state, and local labor market data have been reviewed to assure a demand exists for the POS occupations and that the number of POS completers will not significantly exceed this demand. Department of Labor data are available and/or documented. Supporting evidence of supply and demand is submitted with this proposal. ☐ No data exist for POS due to a unique labor market demand. Supporting evidence of demand is submitted with this proposal. Evidence may include, but is not limited to: documentation of national, regional, state, or local labor trends or letters from employers or workforce agencies documenting projected employment specific to the career pathway.

ACADEMIC AND TECHNICAL SKILL STANDARDS
List the academic, technical, and workplace skills and knowledge used to develop the POS.
Title and source of academic standards:
Title and source of technical skill standards:
Title and source of workplace or other skill standards, as applicable:

EARLY CAREER AND EARLY COLLEGE OPPORTUNITIES
Identify POS early career opportunities, industry-recognized certifications and licenses, options for early college credit, two- and four-year degrees and certification programs alignment, and the technical skill assessment for the program of study. Attach articulation agreements.
Describe early career opportunities (i.e. work-based learning experiences and industry-mentored projects):
List industry-recognized certifications and/or licenses, as appropriate (include the partner organization and credential):
Describe early college credit options (i.e. advanced placement, dual enrollment, transcripted and/or articulated credit, credit by exam, pre-apprenticeship, other) and options for two- and four-year degree and/or certification program alignment (attach articulation agreement). The partner organization and hours of credit earned should be included, as applicable:
List technical skill assessment(s) for the program of study (i.e. industry recognized certification or license, advanced placement, dual enrollment, transcripted and/or articulated credit, credit by exam): ☐ Certification/credentialing exam (specify): ☐ Licensing exam (specify): ☐ Nationally recognized exam (specify): ☐ Advanced standing (specify): ☐ Other (specify):

POS OVERVIEW, COURSE DESCRIPTIONS, END-OF-COURSE, AND PROGRAM ASSESSMENTS
Provide a program of study overview that broadly describes the program and student expectations. Identify end-of-program assessment(s) and opportunities for students to participate in early college and early career experiences. List each course title in the CTE program. Provide an overview of each course and define what students should know and be able to demonstrate upon completion of each level. Identify appropriate end-of-course assessment(s).
Program of Study Overview:
End-of-Program Assessment(s): ☐ Certification/credentialing exam (specify): ☐ Licensing exam (specify): ☐ Nationally recognized exam (specify): ☐ Other (specify):
Course Title:
Course Description (include prerequisites):
Course Knowledge and Skills (what students will know and be able to do):
End-of-Course Assessment(s): ☐ Teacher designed assessment ☐ LEA designed assessment ☐ Certification/credentialing exam (specify): ☐ Licensing exam (specify): ☐ Nationally recognized exam (specify): ☐ Other (specify):
Course title:
Course description (include prerequisites):
Course knowledge and skills (what students will know and be able to do):
End-of-Course Assessment(s): ☐ Teacher designed assessment ☐ LEA designed assessment ☐ Certification/credentialing exam (specify): ☐ Licensing exam (specify): ☐ Nationally recognized exam (specify):

☐ Other (specify):

Course title:

Course description (include prerequisites):

Course knowledge and skills (what students will know and be able to do):

End-of-Course Assessment(s):

☐ Teacher designed assessment

☐ LEA designed assessment

☐ Certification/credentialing exam (specify):

☐ Licensing exam (specify):

☐ Nationally recognized exam (specify):

☐ Other (specify):

Course title:

Course description (include prerequisites):

Course knowledge and skills (what students will know and be able to do):

End-of-Course Assessment(s):

☐ Teacher designed assessment

☐ LEA designed assessment

☐ Certification/credentialing exam (specify):

☐ Licensing exam (specify):

☐ Nationally recognized exam (specify):

☐ Other (specify):

Course title:

Course description (include prerequisites):

Course knowledge and skills (what students will know and be able to do):

End-of-Course Assessment(s):

- ☐ Teacher designed assessment
- ☐ LEA designed assessment
- ☐ Certification/credentialing exam (specify):
- ☐ Licensing exam (specify):
- ☐ Nationally recognized exam (specify):
- ☐ Other (specify):

Course title:

Course description (include prerequisites):

Course knowledge and skills (what students will know and be able to do):

End-of-Course Assessment(s):

- ☐ Teacher designed assessment
- ☐ LEA designed assessment
- ☐ Certification/credentialing exam (specify):
- ☐ Licensing exam (specify):
- ☐ Nationally recognized exam (specify):
- ☐ Other (specify):

PROGRAM OF STUDY CURRICULUM

Identify the method of technical and academic curriculum development (adopted, adapted, or developed in accordance with guidance from the program advisory committee).

POS technical and academic curriculum will be:

- ☐ Adopted (specify source):
- ☐ Adapted (specify source):
- ☐ Developed locally (describe):
- ☐ Other (specify):

VALUE-ADDED OPPORTUNITIES

List extended early career and college credit opportunities available during the student's senior year. Document transition services, cooperative learning experiences, additional dual enrollment, and/or other options.

Opportunities for extended and accelerated learning include:

- ☐ Cooperative education (describe):
- ☐ Structured internship (describe):
- ☐ Dual enrollment (list):
- ☐ Advanced Placement (list):
- ☐ Transition services (describe):

☐	Other (describe):

CAREER AND TECHNICAL STUDENT ORGANIZATIONS	
Indicate the Career and Technical Student Organization affiliation by checking the appropriate box.	
☐ BPA	☐ FFA
☐ DECA	☐ HOSA
☐ FCCLA	☐ SkillsUSA
☐ FEA	☐ TSA

PROGRAM OF STUDY MATRIX
Complete and attach the POS matrix to demonstrate the alignment of academic and technical courses, culminating early career and/or early college experiences. Identify appropriate certification and licensure options, opportunities for obtaining early college credit (courses with articulated or dual enrollment credit agreements should be appropriately designated within the matrix), the post-secondary program sequence, and potential career options.
Access the Program of Study Matrix (see Appendix A).

DEPARTMENT OF EDUCATION PROGRAM OF STUDY APPROVAL		
The following section will be completed and maintained by the Delaware Department of Education CTE & STEM Office.		
Date Program of Study Proposal Received:		
Local Education Agency (LEA): School(s):	Program of Study Start Date:	
LEA CTE Coordinator Name:	Phone:	E-Mail Address:
Career Cluster:	CTE Program of Study Title / CIP Number:	
CTE Pathway Course Sequence/CIP Numbers: 1. Name/CIP: 2. Name/CIP: 3. Name/CIP:		
Concentrator/Completer Courses: Concentrator Course: Completer Course:		
Program of Study Request: ☐ State-model CTE POS ☐ Application for a new local POS		
Program of Study Documentation: ☐ Labor market data ☐ Articulation agreement(s) ☐ Program of Study matrix		
CTE & STEM Director Signature:		Date:
the Department Chief Academic Officer Signature :		Date:

APPENDIX A

URL REFERENCE LIST

[14 Del.C. §505] – High School Graduation Requirements and Diplomas
http://regulations.delaware.gov/AdminCode/title14/500/505

Current List of State-Model CTE Programs of Study
http://dedoe.schoolwires.net/Page/2016

Delaware Department of Labor – Occupations and Industry Projections
http://www.delawareworks.com/oolmi/Information/LMIData/Projections.aspx

Delaware 2022 Occupation and Industry Projections
http://www.delawareworks.com/oolmi/Information/Publications/Delaware.aspx

Economic Development and Employer Planning System (EDEPS)
http://www.edeps.org/

Safety First: Safe Instructional Practices in the Classroom and Laboratory
http://regulations.delaware.gov/AdminCode/title14/800/2011SafetyFirstManual.pdf

[14 Del.C. §885] – Safe Management and Disposal of Chemicals in the Delaware Public School System
http://regulations.delaware.gov/AdminCode/title14/800/885

Program of Study Matrix
http://dedoe.schoolwires.net/Page/2016

[14 Del.C. §1598] – Delaware Professional Development Standards
http://regulations.delaware.gov/AdminCode/title14/1500/1598

The National Career Clusters® Framework
http://www.careertech.org/Career-Clusters

APPENDIX B

Delaware Department of Education Career and Technical Education & STEM Staff Phone: 302.735.4015 Fax: 302.739.1780
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Geri Donahue, Administrative Secretary geri.donahue@doe.k12.de.us
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