

Program Content

CR 100.5(6)(iv)(a)(2)(i) a technical and academic curriculum that achieves the commencement level of the appropriate New York State learning standards for all courses in the career and technical education program, including integrated and/or specialized English, mathematics, science, economics and government, and faculty with State certification in appropriate academic and/or technical subjects;

Definitions:

1. Technical curriculum—CTE coursework which prepares students for employment opportunities and further study in the specific career area
2. Academic curriculum—Academic coursework in the area of English language arts, mathematics, science, and social studies
3. Commencement level standards—State learning standards and state assessments that reflect the knowledge, skills, and understandings all students are expected to know and be able to demonstrate upon receiving a high school diploma
4. Integrated and/or specialized coursework—*see below for [integrated and specialized credit](#)*
5. Faculty with appropriate state certification—*see section on [program faculty](#)*

Federal Definition of a Program of Study

In 2018, with the passage of [Perkins V](#), a formal definition of a program of study was developed. This definition, combined with New York State’s regulations, form the policies and procedures guiding program approval. While not all schools may directly receive Perkins funds, the federal definition is applied to all NYSED-approved CTE programs. This definition requires that all programs:

- Incorporate challenging state academic standards
- Address both academic and technical knowledge and skills, including employability skills which are delivered through New York’s Career and Financial Management (CFM) framework
- Align with needs of industries in the economy of the state, region, tribal community, or local area
- Progress in specificity (beginning with all aspects of an industry or career cluster and leading to more occupation-specific instruction)
- Culminate in the opportunity for students to attain a recognized postsecondary credential including opportunities for college credit, advanced standing, industry certifications, licensure, and collegiate degrees in the career area)
- Provide multiple entry and exit points along the career and technical education continuum

Standards for Curriculum Alignment

- [New York State Standards](#)—These are the New York State standards that are appropriate and applicable to the technical content of a CTE program. Content must align with the [CDOS standards](#) and New York State standards for specific content areas:
 - [Math, Science, and Technology](#)
 - [Physical Education, Health, and Family and Consumer Sciences](#)
 - [Arts](#)
 - [Computer Science and Digital Fluency](#)

- Industry standards—These are standards specific to the career area.
- Academic standards— Even if not seeking integrated/specialized credit, other academic standards should be included as part of program review. Only crosswalk the standards that are program related. Academic standards that can be incorporated are:
 - [English Language Arts](#)
 - [Mathematics](#)
 - [Science](#)
 - [Economics/Participation in Government](#)
 - Other standards as appropriate

Submission of standard crosswalks is not a routine requirement for program approval; however, applicants should be prepared to submit crosswalks if requested as part of the program review.

Models of Program Delivery

There are two main models of program delivery for NYSED approved CTE content:

Sequential Model—A sequence of related courses that are put together to build a program of study

Example: A sequential model could be an entrepreneurship program in which students start with an Introduction to Business Class and then progress into coursework in introductory management, marketing, and finance before culminating in an entrepreneurship class which applies all of the previously learned components.

Blocked Model— A multi-period format typically delivered by a single teacher that scaffolds curriculum instead of delivering curriculum as separate but related coursework.

Example: A blocked model could be an animal science program in which students receive all CTE instruction with one teacher in a multi-period format. This model gives the teacher the ability to scaffold curriculum within their instructional time rather than scaffolding across multiple courses as is the case in the sequential model.

Regardless of the instructional model chosen:

- All programs must provide scaffolded instruction. This means that the content will start with more general topics and will increase in specificity and complexity as students near the completion of the program content.
- Program content is required to be delivered in a one-to-four-year time frame.
- Program content must include no less than three units of CTE instruction in the program of study as well as at least one-half unit of career and financial management instruction for a cumulative total of no less than 3.5 units of CTE credit.

Career and Financial Management

Career and Financial Management (CFM) is a requirement of all NYSED-approved CTE programs. CFM provides students with the necessary career and life skills for success beyond high school.

Career and Financial Management content:

- Must be included in all NYSED-approved CTE programs.
- Must provide a minimum of one half-unit of credit, which is equivalent to one New York City credit.
- Can be delivered as either a stand-alone course or the content can be embedded throughout the content of a CTE program. *The method in which CFM curriculum is delivered is at the discretion of the LEA or BOCES.*
- Must include the sixteen themes identified in the [Career and Financial Management framework](#) which was updated in 2018. If an LEA or BOCES decides that CFM is best delivered as embedded content (instead of as a stand-alone course), then a crosswalk demonstrating where the sixteen themes are being addressed in the program of study must be completed and made available to NYSED upon request.

If CFM is delivered as a stand-alone course reported under SCED code 22152 and is operated under a different name locally, please clearly identify this in section 2 of the application.

Integrated and Specialized Coursework

Integrated Coursework

CR100.5 (d)(6)(i)(a) An integrated career and technical education course shall mean a course that combines career and technical education and academic commencement level learning standards and may be jointly developed and taught by an academic subject teacher and/or a career and technical education teacher. Successful completion of one unit of study in an integrated career and technical education course may be awarded only one unit of credit but may be used to meet the distribution requirements in more than one subject.

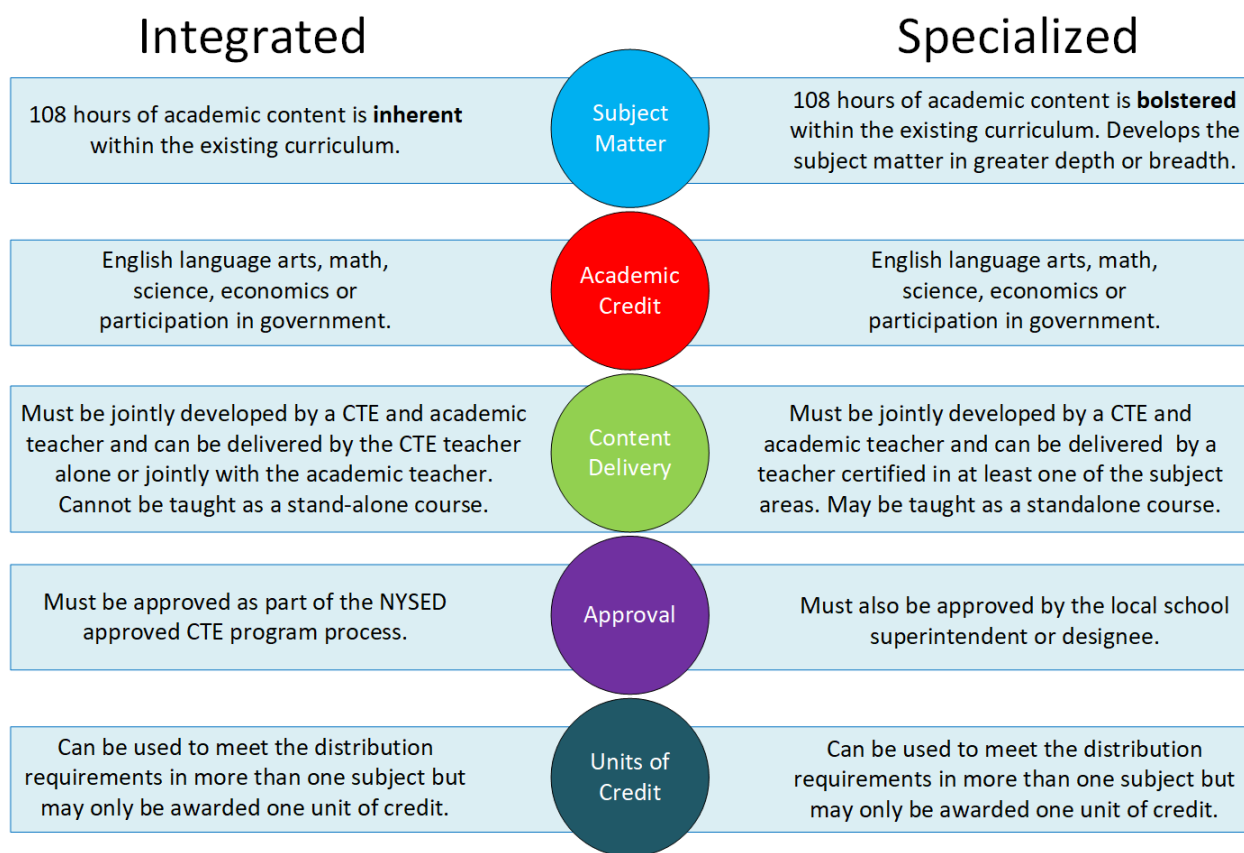
- Academic content is **inherent** within the CTE curriculum covered in the program of study and includes a minimum of 108 hours of content in the academic area.
- Courses must be jointly planned by appropriately certified academic and career and technical education teachers. Courses can be delivered by appropriately certified academic and career and technical education teachers or by a certified career and technical education teacher.
- Successful students earn one unit of credit toward the 22 credits required for a diploma. That unit may be used to meet distribution requirements of more than one subject but may only be awarded one unit of credit, e.g., an integrated science credit may be used to meet the minimum credits required for program approval and the credit may be applied toward diploma requirements for science. It is a district's decision to determine how the credit will be distributed for diploma requirements.

Specialized Coursework

CR100.5 (b)(7)(iv) A specialized course is a course that meets the requirements of a unit of credit as defined in section 100.1(a) of this Part and the New York State commencement-level learning standards as established by the commissioner. A specialized course develops the subject in greater depth and/or breadth and/or may be interdisciplinary. Successful completion of one unit of study in an interdisciplinary specialized course may be awarded only one unit of credit but may be used to meet the distribution requirements in more than one subject. In a public high school, an interdisciplinary specialized course shall be taught by a teacher certified in at least one of the subjects.

- Specialized credit is available to students who have passed the required assessment in the academic area. Credit is earned when a student demonstrates achievement of the learning objectives (based on commencement level learning standards) for a unit of study. In addition to the time requirement, demonstration and assessment of content knowledge is required before a unit of credit is awarded.
- Academic content is **bolstered** and not inherent within the CTE curriculum covered in the program of study and includes a minimum of 108 hours of content in the academic area.
- Successful students earn one unit of credit toward the 22 credits required for a diploma. That unit may be used to meet distribution requirements of more than one subject but may only be awarded one unit of credit, e.g., a specialized science credit may be used to meet the minimum credits required for program approval and the credit may be applied toward diploma requirements for science. It is a district's decision to determine how the credit will be distributed for diploma requirements.

A Comparison of Integrated and Specialized Coursework



The graphic above compares the differences between integrated and specialized coursework including the characteristics of what they look like in practice.

The key difference is not as much in **what** content exists but **how** it exists. In an integrated course, a student must know the commencement level academic content in order to learn the CTE content. In a specialized course, the academic content is not inherently there but is bolstered so that 108 hours of academics can be provided in the program.

Information on current commencement level academic standards for ELA, math, science, and social studies can be found on the [Office of Curriculum and Instruction web page](#).

Example 1: An engineering program may seek approval for integrated ELA, math, and science credit as students need to learn commencement level standards in all three of these academic areas in order to learn the engineering content of the CTE program.

Example 2: An information technology (IT) program may seek approval for specialized mathematics as the information technology program does not inherently include commencement level mathematics content. To meet commencement level requirements for math in this example, a school would bolster the mathematics content within the program.

Note: These examples are being given to help define the difference between integrated and specialized credit. Each program application that is received is individually evaluated for the

appropriateness of integrated or specialized credit therefore not all engineering or IT programs may qualify as described in the example.

Other Characteristics of Content

Additional considerations for program content are:

- Programs must be accessible to all students, including students with disabilities, English language learners, and any other special populations as defined in Perkins legislation. Supports must be provided to assist students where necessary.
- Curriculum maps and crosswalks for NYSED-approved CTE programs must be created, maintained, and submitted in a digital format for review if requested by the associate reviewing the program application.
- Some program areas may have additional content-specific considerations that have not been addressed in this resource. For further information about content-specific requirements, please visit the [appropriate CTE content area page](#) or contact the appropriate [content area associate](#).