Cherokee County School District

Agenda Request Form

Meeting Date	Agenda Item Number
November 19, 2026	Action Item 2

Title

Carpentry Pathway for Geometry Credit under CTAE+

Requested Action

School Board Consideration of Superintendent's Recommendation for Approval of the Carpentry Pathway to Satisfy the Geometry Graduation Credit Requirement under CTAE+.

Summary Explanation and Background

CTAE+ allows Georgia high school students to earn credit toward mathematics, science, or English Language Arts graduation requirements by successfully completing approved Career, Technical and Agricultural Education (CTAE) pathways that incorporate substantial academic content in those subjects. The Georgia Department of Education has determined that the Carpentry Pathway aligns with the state's Geometry standards. Before Construction Geometry credit can be awarded for students who successfully complete the pathway, local Board of Education approval is required. An executive summary providing additional information about CTAE+ and the requested Board action is attached for review.

Financial Impact

N/A

Exhibits: (List) — Enter URL below

See Attached Executive Summary

Source of Additional Information — Open URL

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Executive Summary for Approval of Carpentry Pathway for Construction Geometry Credit under CTAE+

CTAE+ is a Georgia Department of Education (GaDOE) initiative that lets high school students earn credit toward mathematics, science, or English Language Arts graduation requirements by completing approved CTAE pathways with substantial academic content. Cherokee County School District (CCSD) currently offers CTAE+ credit through 11 pathways: Agriculture Mechanics Systems, Architectural Drawing and Design, Audio-Video Technology, Electrical, Energy and Power, Engineering Drafting and Design, Engineering and Technology, Flight Operations, Graphic Communications, Unmanned Aircraft Systems, and Welding.

The proposed action would expand CCSD's existing CTAE+ opportunities to include the Carpentry Pathway as an approved option for satisfying the Geometry graduation requirement. This is not a new program or process; rather, it extends the district's current CTAE+ framework to an additional pathway. GaDOE has determined that the Carpentry Pathway standards align with the Georgia K-12 Mathematics Standards for Geometry. With local Board of Education approval, students who successfully complete the following required courses may earn Construction Geometry credit (Course Code 27.09280):

- Industrial Fundamentals of Occupational Safety (46.54500)
- Introduction to Construction (46.54600)
- Carpentry I (46.55000)

Consistent with the district's established CTAE+ procedures, students who elect to use the completed Carpentry Pathway to satisfy the Geometry graduation requirement would receive Construction Geometry credit (Course Code 27.09280) with a grade of Pass ("P") upon successful completion of all three required pathway courses. A crosswalk demonstrating the alignment between the Carpentry Pathway standards and Georgia's Geometry standards is included for reference.

Approval is requested for the Board of Education to recognize successful completion of the Carpentry Pathway as satisfying the Geometry mathematics graduation requirement. Upon approval, students who successfully complete the pathway would be eligible to receive Construction Geometry (Course Code 27.09280) credit in accordance with Georgia Department of Education CTAE+ guidance and CCSD procedures.

Georgia High School Geometry – Carpentry Crosswalk	
Pathway Name	Carpentry Construction Pathway

Alignment Analysis			
High School Geometry Standards Crosswalk	**GADOE Courses**		
	Industry Fundamentals and Occupational Safety 46.54500	**Introduction to Construction**	**Carpentry**
Concepts and Connections			
G.MP: Display perseverance and patience in problem-solving. Demonstrate skills and strategies needed to succeed in mathematics, including critical thinking, reasoning, and effective collaboration and expression. Seek help and apply feedback. Set and monitor goals.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2
G.MM.1: Apply mathematics to real-life situations; model real-life phenomena using mathematics.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2
G.PAR.2: Interpret the structure of polynomial expressions and perform operations with polynomials within a geometric framework.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2
G.GSR.3: Experiment with transformations in the plane to develop precise definitions for translations, rotations, and reflections and use these to describe symmetries and congruence to model and explain real-life phenomena	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2

*G.GSR.4 Establish facts between angle relations and generate valid arguments to defend facts established. Prove theorems and solve geometric problems involving lines and angles to model and explain real-life phenomena.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4 (will need to add content)	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2 (will need to add content)
*G.GSR.5 Describe dilations in terms of center and scale factor and use these terms to describe properties of dilations; use the precise definition of a dilation to describe similarity and establish the criterion for triangles to be similar; use these terms, definitions, and criterion to prove similarity, model, and explain real-life phenomena.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4 (will need to add content)	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2 (will need to add content)
G.GSR.6: Examine side ratios of similar triangles; use the relationship between right triangles to develop an understanding of sine and cosine to solve geometric problems and to model and explain real-life phenomena.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2
*G.GSR.7 Explore the concept of a radian measure and special right triangles.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4 (will need to add content)	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2 (will need to add content)
G.GSR.8: Examine and apply theorems involving circles; describe and derive arc length and area of a sector; and model and explain real-life situations involving circles	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2

G.GSR.9 Develop informal arguments for geometric formulas using dissection arguments, limit arguments, and Cavalieri's principle; solve realistic problems involving volume; explore and visualize relationships between two-dimensional and three-dimensional objects to model and explain real-life phenomena.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2
G.PR.10 Solve problems involving the probability of compound events to make informed decisions; interpret expected value and measures of variability to analyze probability distributions.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2
G.DSR.11: Examine real-life situations presented in a two-way frequency table to calculate probabilities, to model categorical data, and to explain real-life phenomena.	AC- IFOS- 1.3. AC-IFOS- 3.1,3.2,3.3,3.4	AC-IC-1.3	AC-C1-2,2 AC-C1-4.1,4.2,4.3 AC-C1-5.2,5.3 AC-C1-6.1,6.2,6.3 AC-C1-7.3 AC-C1-8.2

*Standards 4, 5, and 7 require additional content. GaDOE provides supplemental instructional resources and lessons within Inspire to support implementation and the seamless integration of these standards into construction instruction.