What is CTAE Delivers?

February 5, 2020





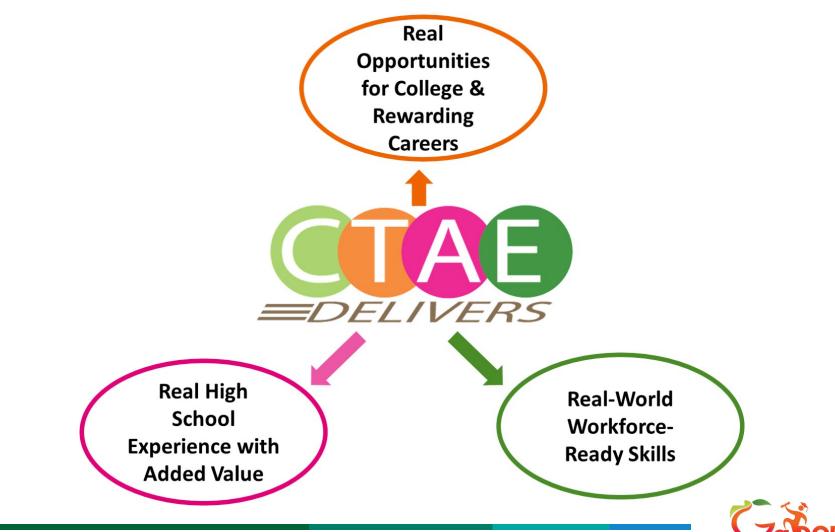




GaDOE Career, Technical, and Agricultural Education







Richard Woods, Georgia's School Superintendent | Georgia Department of Education | Educating Georgia's Future

Georgia Department of Education

CTAE Delivers Real Options for ALL Students for College and Rewarding Careers

CTAE programs allow students to explore a range of options for their future – inside and outside of the classroom.

https://www.wabe.org/pilot-program-to-introduce-agriculture-education-into-georgia-elementary-schools/

Career Ready Diploma Seals FY2019





CTAE Delivers Real Options for ALL Students for College and Rewarding Careers

- Through CTAE, students can start their path toward a career that they are passionate about, while earning valuable experience, college credits, and more..
 - Experiential Learning

CTAE Quick Links

- Georgia CTAE Strategic Plan
- Locally Developed Career Pathway Course Process
- Georgia CTAE Employability Skills Task Force Recommendations
- YouScience Report 2019
- New CTAE Director Training Recommendations
- Experiential Learning web site
- Early post-secondary opportunities



CTAE Delivers a Real High School Experience with More Value

- CTAE programs are <u>PART</u> of high school students can participate in CTE and the other activities they enjoy, such as sports, the arts or whatever else their friends are doing.
- CTAE takes students even further during their high school experience providing opportunities for specialized classes, internships, and networking with members of their community. (FY2018 data below.)
 - 68% GA HS students take at least 1 CTAE course (385,431)
 - 62% GA MS students take at least 1 CTAE course (271,064)
 - 18,396 students participate in WBL
 - STEM/STEAM Certified schools: 44 ES, 14 MS, 14 HS
 - 9CTSOs
 - 17 Career Clusters
 - 130+ Career Pathways
 - Pathway Completers
 - 96.48% CTAE graduation rate
 - Local Pathways

https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Programs-of-Study.aspx

- Credentials 36,177 FY 18
- Programs of Study 43 and more to come

https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Programs-of-Study.aspx

Program of Study: Industrial Maintenance



This Program of Study may serve as a graduation guide for the next four plus years, along with other career planning and educational materials. Courses listed in this model may include recommended coursework and should be individualized to students' educational and career goals. Each graduation plan needs to meet minimum high school graduation requirements. Dual Enrollment courses can be high school academic and/or career technical education courses.

	Mai	Se - nufacturing	condary: Industrial M	aintenance	l		Postsecondary		
Course/Grade	Ninth	Tenth	Eleventh	Twelfth		тсс	Diploma or AAS		Bachelor of Science
English	9 th grade Lit/ Composition	10 th grade Lit/ Composition	American Lit/ Composition	World Lit/Composition / British Lit					
Mathematics	Coordinate Algebra / Algebra I	Analytic Geometry / Geometry	Advanced Algebra Algebra II	[/] Pre-calculus	11				
Science	Physical Science	Biology	Chemistry	Physics	١.			L	The University System of
Social Studies	Psychology	World History	US History	Government (35 unit) Economics (35 unit)		IF11 Industrial Fluid Power Technician TCC	Completion of IF11 Industrial Fluid Power Technician TCC leads to IST4 Industrial	ji j	Georgia offers students' higher education options
Pathway Completer	Industrial Mechanics	Fluid Power and Piping Systems	Electrical Moto Controls	Work-Based Learning, Youth Apprenticeship, or Capstone Project		- IDSY 1170 Industrial Mechanics		providing a wide range of	
Industry Recog Credential (Path		Visit the End of P	athway Assessm	ent Page (see note below)		- IDSY 1190 Fluid Power	Systems Technology diploma or IS13 Industrial	ance o	and associate, baccalaureate, masters, doctoral and professional
	Health & Personal Fitness (can be taken in grades 9-12)	Intro to Digital Technology	Embedded Computing	AP Chemistry		- IDSY 1195 Pumps and Piping Systems	SY 1195 Pumps and Systems Technology degree. SY 1110 Industrial Motor	Ent	
Required/ Selective Electives	2 units required for ad System C For a listing of Mod offered at your high	Language/Latin Imissions to Georgia olleges/Universities Iern Language/Latin I school, please cont Ir, or curriculum hand	courses chec	Other Electives I listing of other elective courses ed at your high school, please k with your advisor, counselor, or culum handbook.		- IDSY 1110 Industrial Motor Controls I		h	degrees. https://apps.usq.edu/ords /f?p=118:1:0

NOTE: Students have many options to ENTER and EXIT from their academic studies into the workforce. When a student graduates from high school, they are eligible to choose one of many ENTRANCE POINT options: 1. Enroll in either a 2 or 4 year post-secondary program; 2. Enroll in an apprenticeship program or the military; or 3. Enter the workforce using technical skills learned in high school. When a student finishes a 2- or 4-year degree program, they may choose to EXIT and 1. Enroll in an apprenticeship program or the military; 2. Enroll in a professional university degree program; or 3. Enter the workforce using technical skills learned.

Industrial Maintenance Career Pathway Completers - Industry Credentialing for High School Students

Upon completion of sequenced courses in the Industrial Maintenance Career Pathway, students are eligible to complete the Industry-Recognized student credential for fulfillment of the End of Pathway Assessment. Secondary students completing the Industrial Maintenance pathway will be able to sit for the National Industry Credentialed assessment offered on-line from NCCER and NIMS. Once mastery is reached, students will receive recognition for completion and use this credential in conjunction with their job or continuing training. For specific assessment information, refer to: http://bit.ty/GAManufacturing

Developed 1-31-2017; Revised 5-23-2018



Sample High Demand Careers in Georgia				
Occupation Specialties Level of Education Needed Georgia Average Salary Openings in Georgia		2014 – 2024 Employment Outlook		
Industrial Machinery Mechanics	Postsecondary Certificate	\$45,688	424	High Demand, High Skill
Maintenance Workers, Machinery	Diploma, some postsecondary	\$41,168	66	High Demand, High Skill
Millwrights	Diploma, some postsecondary	\$48,030	65	High Demand, High Skill

GDOL Labor Market Explorer

Go to <u>GAfutures</u> at <u>www.gafutures.org</u> for more information about your education and career planning, including valuable financial information (grants and scholarships including HOPE Program, grants and loans, FAFSA, and CSS forms).

Career Enhancement Opportunities		Postsecondary Options: 4-Year Universities/ Colleges 2-Year Colleges Technical Colleges State Registered Apprenticeships Special Purpose Schools On-the-Job Training Military	Earning Postsecondary Credits While in High School A vital way to get ahead and realize you can pass college courses is by earning postsecondary credits as a high school student. Georgia offers a dual credit program titled Dual Enrollment. You need to talk with your parents, school counselor, or advisor about the proper courses to take each year in high school and dual credit. Students completing the course work in this Plan, will have earned/completed an Industry Credential, Technical Certificate of Credit (TCC), Associates of Applied Science Degree, and/or <u>Bachelor's Degree</u> .
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Postsecondary Transition

- Students who will continue their education in a Program of Study at one of the University System of Georgia
 institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution
 to institution. Contact the selected institution for specific testing information. Additional admissions information can
 be found at Staying <u>Ωn</u> Course. (www.usg.edu/assets/student_affairs/documents/Staying_on_Course.pdf)
- Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to complete a placement exam.
- Students who will continue their education and training in the US Military should take the ASVAB assessment.
- Students should utilize electronic college and career databases to select the most appropriate postsecondary
 opportunities to match their selected career field, including registered apprenticeships.
- Georgia's dual-credit programs have been combined into one program entitled Dual Enrollment, in which high school students may earn their high school course credits while taking college courses.

Related Pathway Occupations	Other Related Occupations
Millwright Machinery Maintenance Workers	
	*ONET Online

Industrial Maintenance Pathway Description

Industrial machinery mechanics and maintenance workers maintain and repair factory equipment and other industrial machinery, such as conveying systems, production machinery, and packaging equipment. Millwrights install, dismantle, repair, reassemble, and move machinery in factories, power plants, and construction sites.

Workers in this occupation must follow safety precautions and use protective equipment, such as hardhats, safety glasses, and hearing protectors. Most work full time. However, they may be on call and work night or weekend shifts. Overtime is common.

Industrial machinery mechanics and maintenance workers and millwrights typically need a high school diploma. However, industrial machinery mechanics need a year or more of training after high school, whereas maintenance workers typically receive on-the-job training that lasts up to a year. Most millwrights go through a 4-year apprenticeship.

Employment of industrial machinery mechanics and maintenance workers and millwrights is projected to grow 17 percent from 2012 to 2022, faster than the average for all occupations. The need to keep increasingly sophisticated machinery functioning and efficient will drive demand for these workers. Job prospects for qualified applicants should be very good.

Compare the job duties, education, job growth, and pay of industrial machinery mechanics and maintenance workers and millwrights with similar occupations.



CTAE Delivers Real-World Workforce-Ready Skills

- CTAE is a unique opportunity for hands-on learning putting students at the center of the action.
 - Employability Skills
 - Work-based Learning
 - CTSOs

CTAE provides the skills and confidence students need to pursue career options, discover their passions and get on a path to success.

- Educator Externships
- School Counselors
- CTAE Teachers
- CTAE Administrators
- Partners
- YouScience (listening session results)



CTAE Toolkit for EVERYONE



Educating Georgia's Future by graduating students who are ready to learn, ready to live, and ready to lead.

CTAE Toolkit Items

- CTAE Glossary
- CTAE Month Fact Cards
- CTAE Month Poster
- I-Heart-CTAE Sign and Step-and-Repeat
- Pathways to Success poster
- Core Messages about CTAE
- Parent Engagement Tool
- Dos and Don'ts for Engaging Parents/Students





CTAE DELIVERS REAL OPTIONS FOR COLLEGE AND REWARDING CAREERS

Through CTAE, students can start their path toward a career that they are passionate about, while earning valuable experience, college credits and more.

CTAE DELIVERS REAL-WORLD SKILLS

CTAE is a unique opportunity for hands-on learning – putting students at the center of the action.

CTAE provides the skills and confidence students need to pursue career options, discover their passions and get on a path to success.

Students in CTAE programs and their parents are *three times as likely* to report they are "very satisfied" with their and their children's ability to learn real-world skills as part of their current education compared to parents and students not involved in CTAE. 18/20 OF THE FASTEST GROWING OCCUPATIONS WITHIN THE NEXT DECADE REQUIRE TECHNICAL EDUCATION.

CTAE DELIVERS A REAL HIGH SCHOOL EXPERIENCE WITH MORE VALUE



CTAE programs are a part of high school – students can participate in CTAE and the other activities they enjoy, such as sports, the arts or whatever else their friends are doing.

CTAE takes students even further during their high school experience – providing opportunities for specialized classes, internships, and networking with members of their community.



OF CTAE STUDENTS SAY THEY "DON'T KNOW" WHAT THEY WILL DO AFTER HIGH SCHOOL.

Make it a priority to teach students skills that make them employable. How can you help champion this in your school?

🕀 ctae.gadoe.org

facebook.com/GeorgiaCareerTech y twitter.com/georgiactae





CTAE FACTS

600,000+ across Georgia enroll in CTAE courses and career pathways STUDENTS every year.

404 There are 404 industry-certified programs offered in CTAE.

61.75% In Georgia public schools, 61.75% of all middle school students and 67.88% of all high school students were enrolled in at least one CTAE class during the 2017-2018 school year.

CTAE HAS PROVEN RESULTS

96.6% In 2018, the average graduation rate was 80.5%. CTAE concentrators had a graduation rate of 96.49%

36,177 In 2018, 36,177 high school CTAE concentrators earned an CREDENTIALS industry credential.

5% MORE STUDENTS CTAE is delivering more Georgia students to post-secondary education. From 2017 to 2018, 5% more students took dual enrollment classes, earning college credit.

GEORGIANS BELIEVE IN CTAE

88% of Georgians *support job or career skills classes* even if that means students spend less time in academic classes.

85% of Georgians believe technology and engineering classes are extremely or *very important*.

90% of Georgians say schools should offer *certificate or licensing programs*, compared to 86% of Americans.

TOP 10 CTAE PROGRAMS

By Percentage of High School Students Enrolled (only top 10 are displayed)

BUSINESS MANAGEMENT AND ADMINISTRATION

INFORMATION TECHNOLOGY

3 FINANCE

HEALTH SCIENCE

HUMAN SERVICES (HS)/FAMILY AND CONSUMER SCIENCES

AGRICULTURE, FOOD AND NATURAL RESOURCES

D HOSPITALITY AND TOURISM

ARTS, AV/ TECHNOLOGY AND COMMUNICATIONS

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

10 MARKETING

Make it a priority to teach students skills that make them employable. How can you help champion this in your school?

🌐 ctae.gadoe.org 🛛 🧜 facebook.com/GeorgiaCareerTech 🛛 😏 twitter.com/georgiactae









Real-world, hands-on skills are the most prominent and essential part of career development within CTAE courses. They take skills necessary for future careers, and build lessons off of those skills to ensure that students are the most prepared for their future careers."

- KIRK BEACHAM, STUDENT



CTAE Classes prepares students for success by teaching them hands-on experience, employability skills, but most of all teaches them how to be successful in the game of life."

- KEDRIONE HARRIS, EDUCATOR



CTAE is a powerful approach to allowing students to discover their interests and passions and then choose an educational pathway in secondary education that will lead them to success in high school, college, and career."

- VALERY LOWE, EDUCATOR



Through intracurricular CTSO's, hands-on project-based instruction, and internship opportunities, CTAE courses prepare students to become the leaders of tomorrow who will build an innovative, ethical and prosperous future for our community and state."

- CAITLIN MITCHELL, EDUCATOR



CTAE does a fantastic job of adapting basic concepts and shows the "application." Students are always thinking "why" do I need to learn this? Why is this important. CTAE answers the questions for the learner.

- DR. DEBBIE PHILLIPS, CPM

Make it a priority to teach students skills that make them employable. How can you help champion this in your school?

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My very first CTAE class was an Intro to Law Enforcement class. This class not only gave me valuable information on possible career pathways that I could take but the class taught me how to successfully prepare for job interviews and also how to keep up the first impression. CTAE classes prepare students for the real world and our futures."

- MAYLYN MANN, STUDENT



CTAE brings industry folks, skills competitions and actual tools they use into the classroom, the learning in the classroom is DIRECTLY connected to the real-world that is waiting for them when they graduate."

- MICHAEL KENIG, INDUSTRY LEADER



CTAE allows students to learn and apply relevant skills that span beyond the four walls of the classroom. CTAE programs have partnerships with employers in their communities...who may provide training, mentorship, opportunities for internships, networking, and even entry-level jobs for students."

- ANGIE LEWIS, CTAE DIRECTOR



CTAE courses provide students with opportunities to take on leadership positions, practice soft skills on a a daily basis, and show students the link from learned skills to real world by providing relevancy in the learned skills."

- JENNIFER BUTLER, EDUCATOR



No other course can ensure that students are as prepared and enthusiastic for life after high school as well as Career, Technical, and Agricultural Education can. By providing me with the tools I needed to succeed, my CTAE pathway has allowed me to get more involved and passionate for my future!"

- ZUBAIDA AIRES; CTAE STUDENT; FCCLA STATE OFFICER

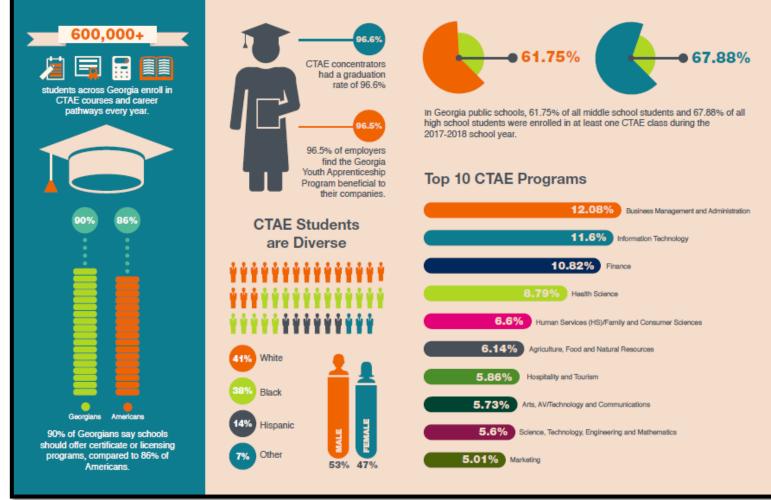
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CTAE DELIVERS







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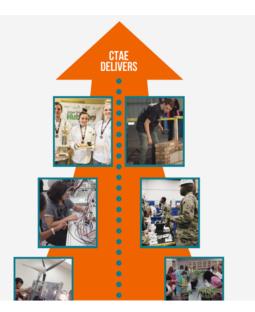


CTAE makes the text book come to life. At no other point in my education career did any course make this happen like CTAE did for me.

MATTHEW GAMBILL, STATE REPRESENTATIVE



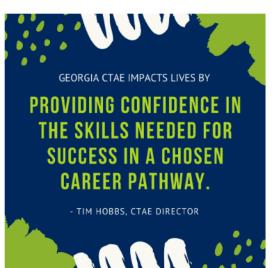
Pictured: Matthew Gambill, Legislator 2. Through CTAE, students can start their path toward a career that they are passionate about, while earning valuable experience, college credits and more.







 "CTAE delivers results because it provides real world work experiences that promote student success." – Tim Hobbs, CTAE Director















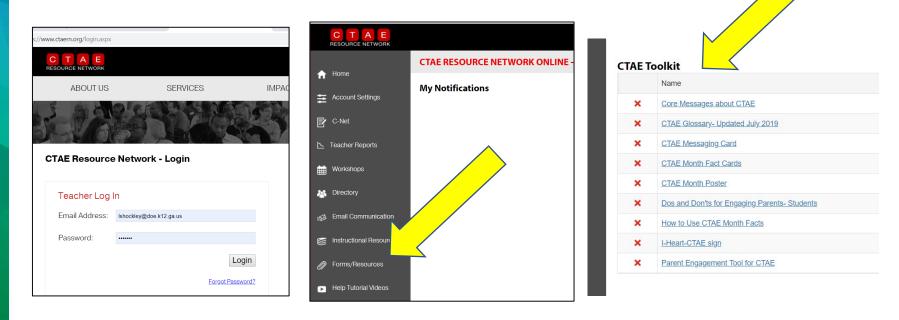






Where to find the CTAE Toolkit?

- Login to <u>www.ctaern.org</u>.
- Click Forms & Resources on the right
- Then scroll down to find CTAE Toolkit.

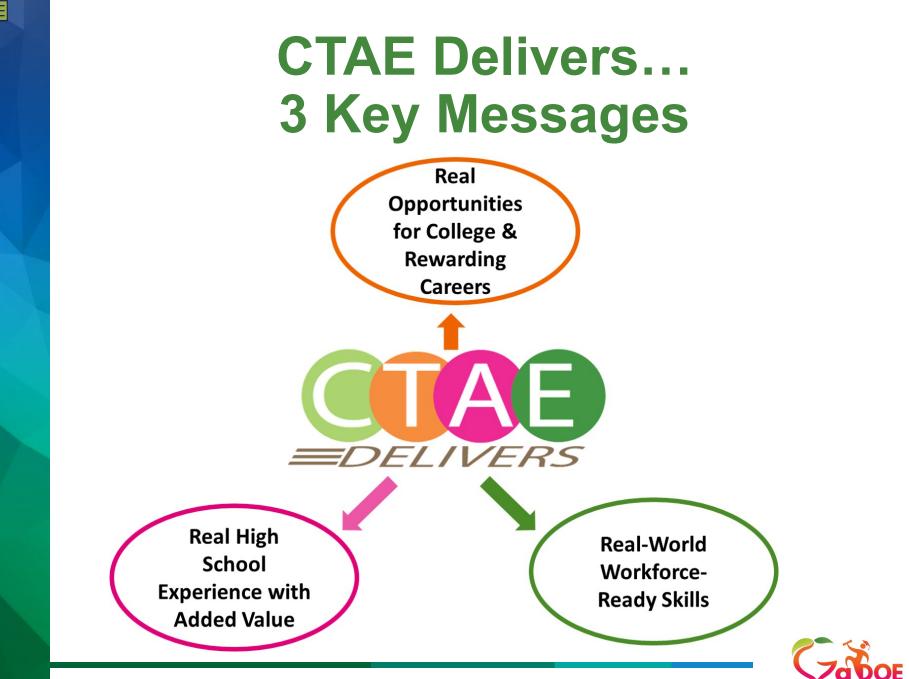




CTAE Delivers!

C T A E RESOURCE NETWORK	Welcome, Linsey Shockley			
A Home	FORMS & RESOURCES			
■ Account Settings	CTAE R	esource Network Resources	+New Resource	
C-Net		Name	Date Added	
Teacher Reports	×	#CTAE Delivers - Email Template with Instructions (Zip)	2/4/2020	
	×	#CTAE Delivers - Infographic (2 Pgs PDE)	2/4/2020	
Workshops	×	#CTAE Delivers - Letterhead Template (MS Word)	2/4/2020	
Directory	×	#CTAE Delivers - Newsletter Template (MS PowerPoint)	2/4/2020	
	×	#CTAE Delivers - Qualitative Handout (1 pg PDF)	2/4/2020	
Email Communication	×	#CTAE Delivers - Quantitative Handout (1 pg PDF)	2/4/2020	
👙 Instructional Resources	×	#CTAE Delivers - Social Media Banners & Avatars (Zip)	2/4/2020	
	×	#CTAE Delivers - Social Media Posts (Zip)	2/4/2020	
Forms/Resources	×	#CTAE Delivers - Stories Handout 1 (1 pg PDF	2/4/2020	
Help Tutorial Videos	×	#CTAE Delivers - Stories Handout 2 (1 pg.PDF)	2/4/2020	





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