ENGINEERING AND TECHNOLOGY

CTAE NEW TEACHERS INSTITUTE
2012

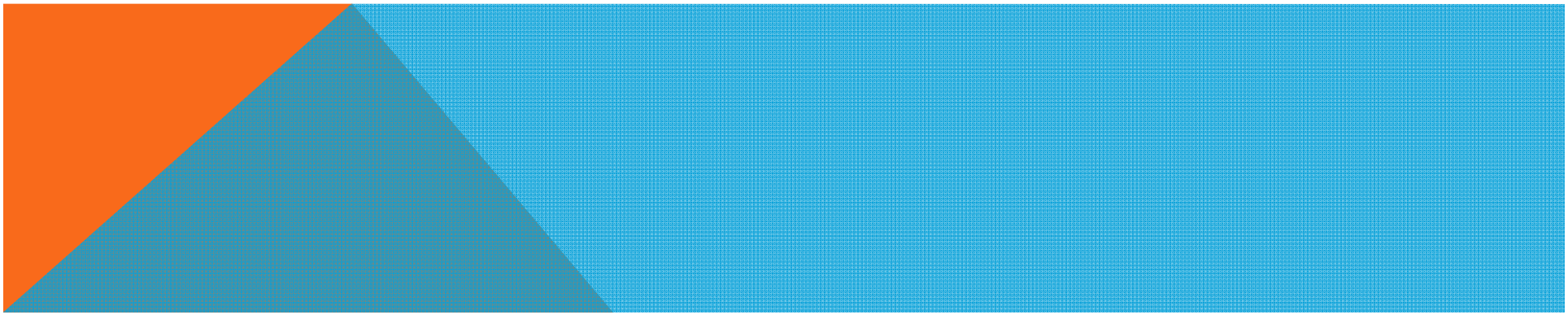
ENGINEERING AND TECHNOLOGY

Career, Technical and Agricultural Education

Engineering and Technology Education Programs

Program Specialist

Mark Crenshaw
404-657-8316 (Office)
404-651-8984 (Fax)
mcrenshaw@doe.k12.ga.us



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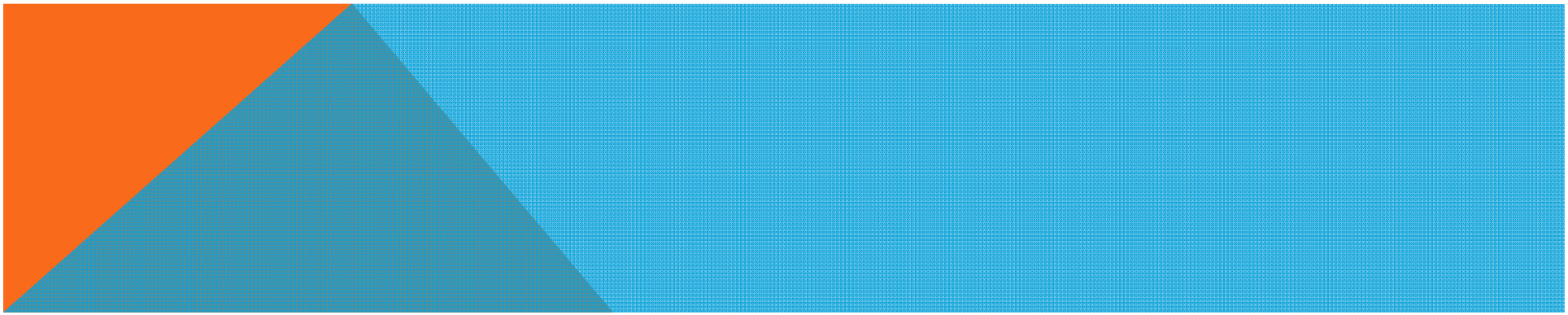
Make sure that you have signed in this evening!

- If you're on an Extended Day contract, this meeting is worth 5 points on your Program of Work!



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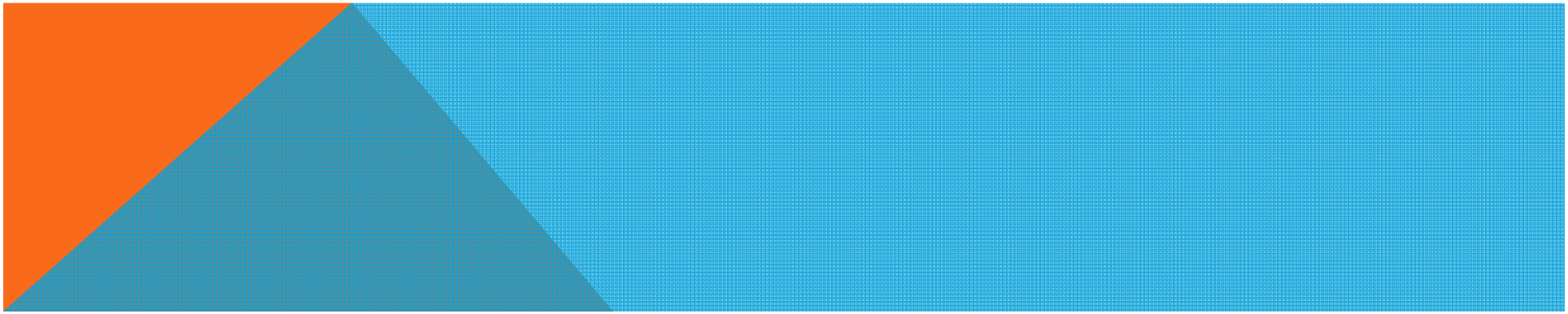
E&T Enrollment Data 2010 -2011

CTAE Programs – 180 Local School Districts

HS – 31,770 (5th of 10 Clusters behind Business, FACS, T&I, Healthcare)(Unduplicated Count)

- Engineering – 18,420 (44%)
- Energy Systems – 12,773 (31%)
- Engineering Graphics and Design – 8,196 (20%)
- Electronics – 1,248 (3%)
- Manufacturing – 1,104 (2%)
- Other Eng. (417)

MS – 87,206 (2nd of 6 Clusters behind Business)



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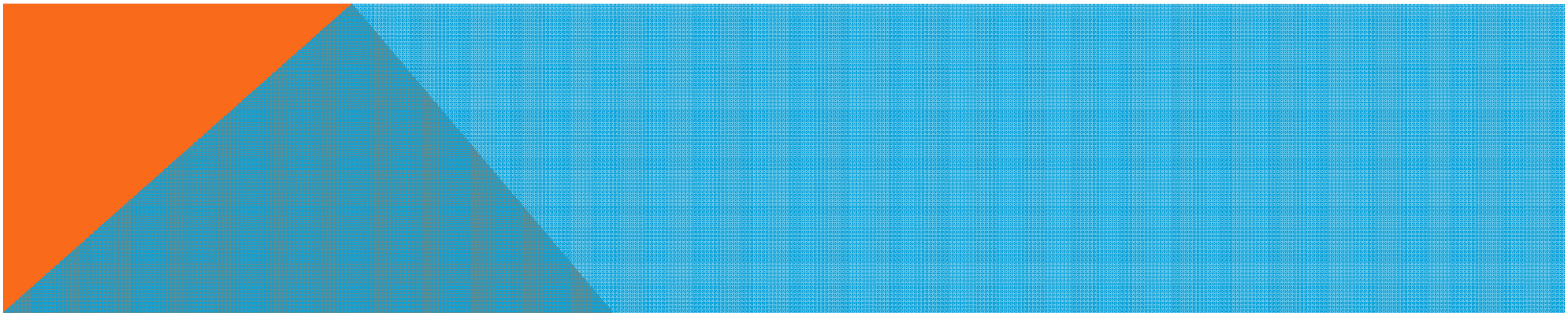
House Bill 186

During the 2011 legislative session the Georgia General Assembly passed House Bill 186.

House Bill 186 mandates that Georgia will align with the 16 Federal Career Cluster framework.

Georgia is adding a 17th Cluster: Energy Systems.

- All courses shall include embedded academic standards.



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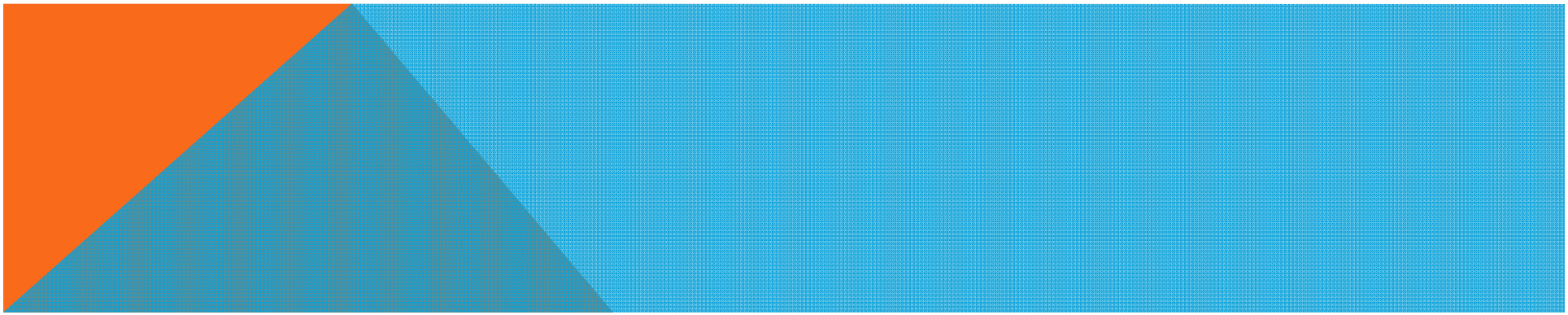
Pathways

All current pathways are being aligned to the National Career Cluster models.

A current survey created by the Carl Vinson Institute and the DOE was set out to all local Chamber of Commerce and we are awaiting results that will guide revisions.

Volunteers are needed to work on curriculum revisions

New courses may be added to offer more options for completing a pathway



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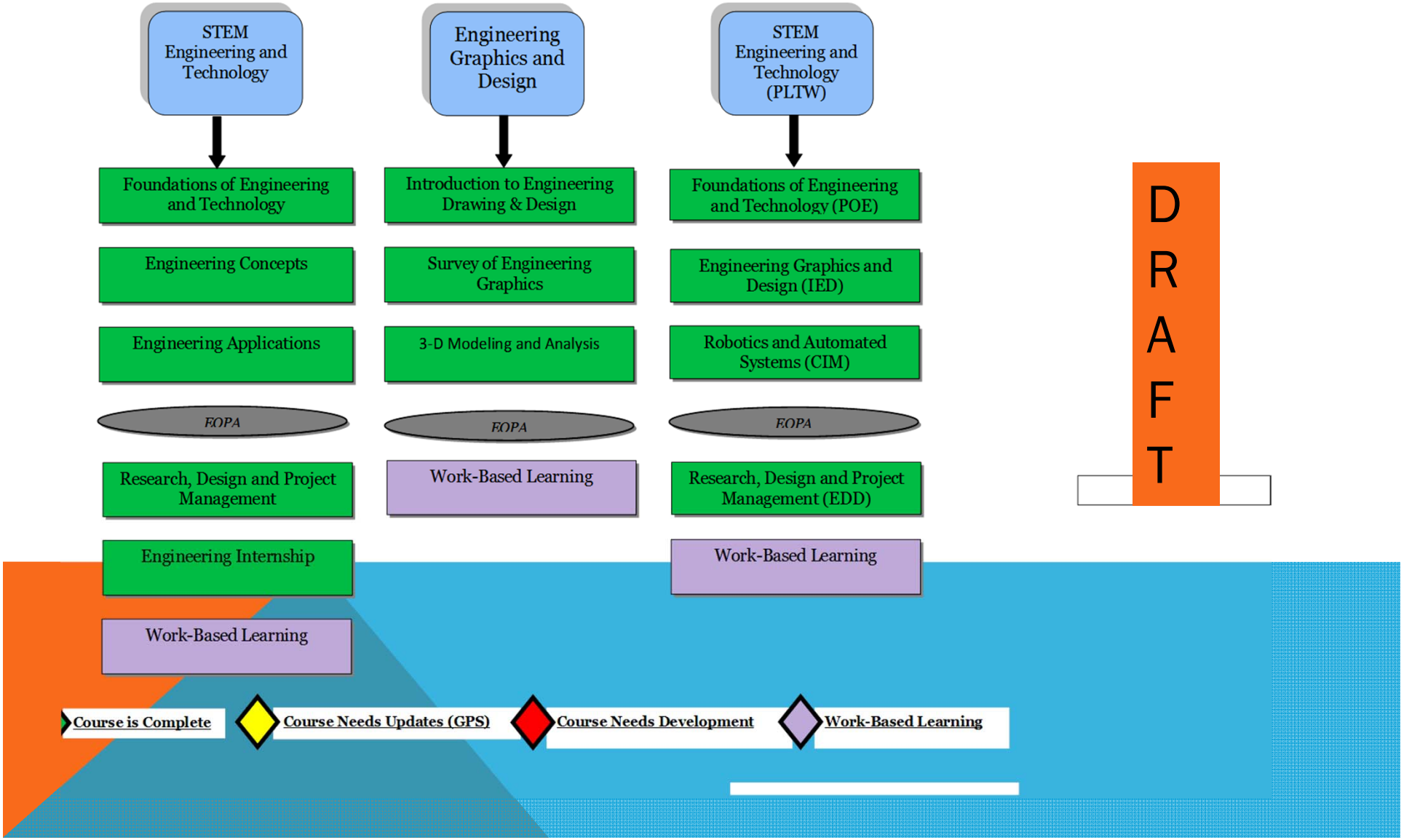
Georgia Science, Technology, Engineering and Math Program

Peach State Pathways Conversion to National Career Cluster

Visual Graph Detailing the Scope of Work



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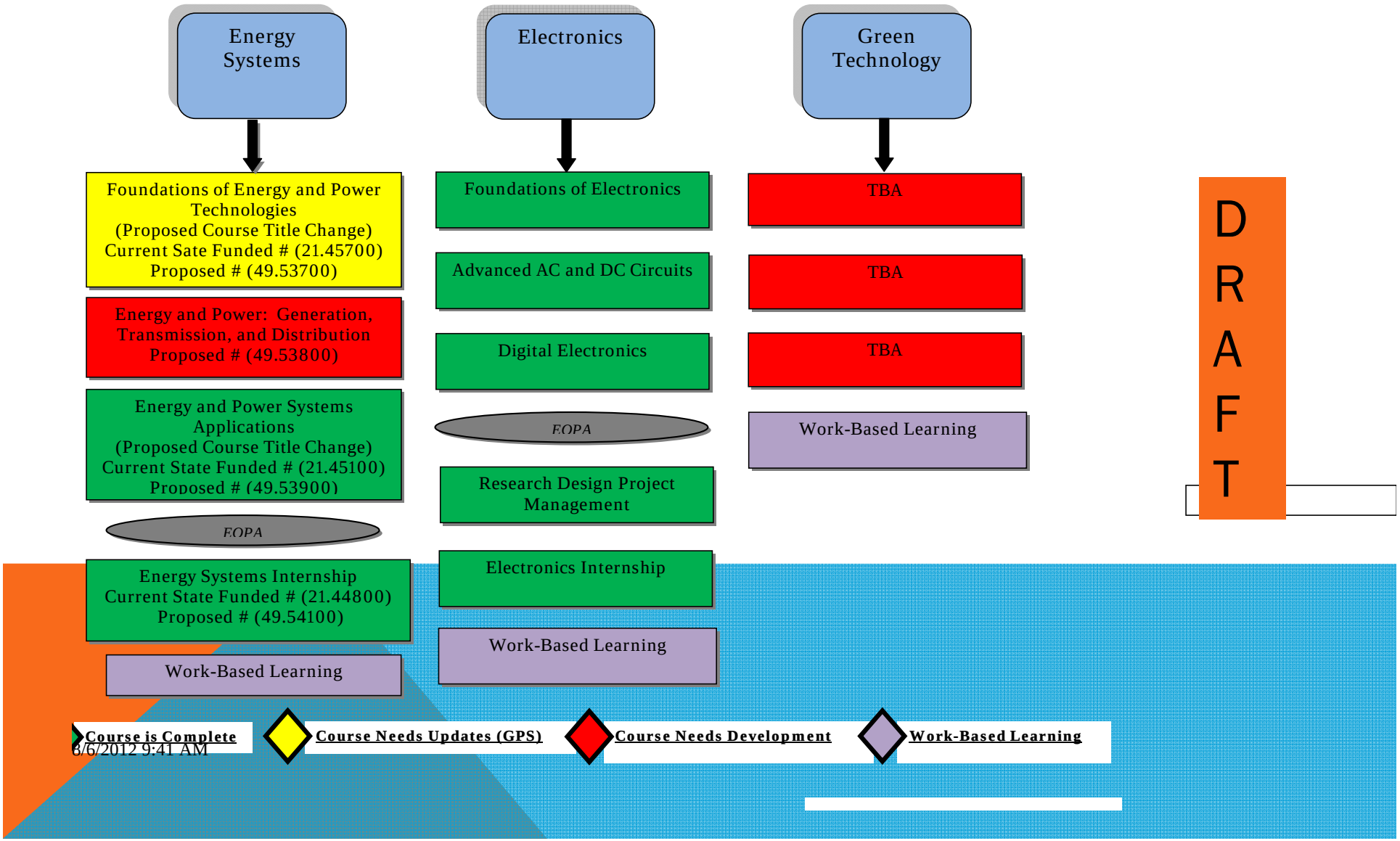
Georgia Energy Systems

Peach State Pathways Conversion to National Career Cluster

Visual Graph Detailing the Scope of Work



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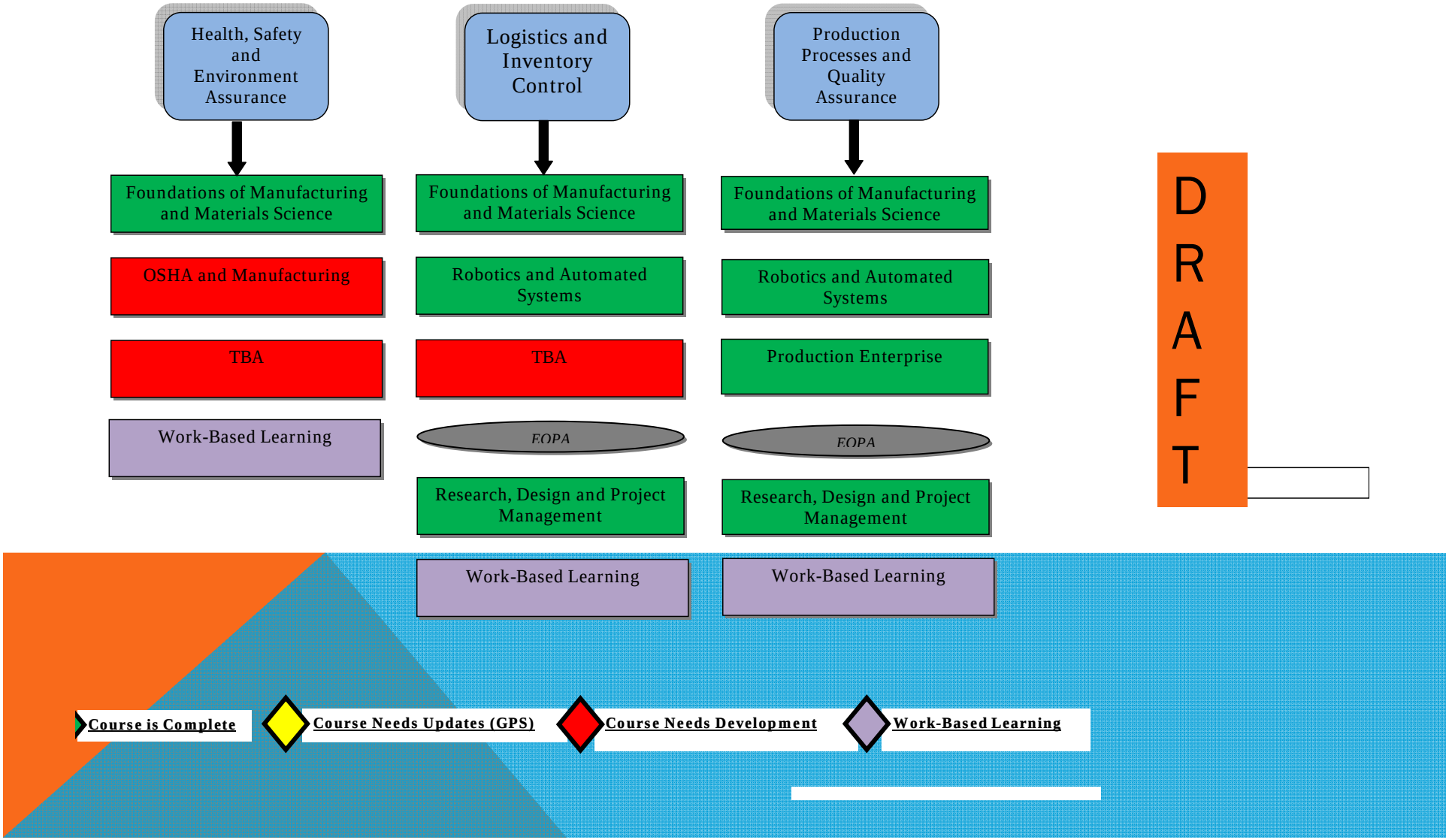
Georgia Manufacturing

Peach State Pathways Conversion to National Career Cluster

Visual Graph Detailing the Scope of Work



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Engineering and Technology

BENEFITS OF REVIEWING OUR CAREER CLUSTER PATHWAYS

Opportunity to seek industry input and expertise

Opportunity to align our courses with the National Assessments and Student Credentialing

Opportunity to embed critical “Soft Skills” in each course

- Opportunity to re-evaluate dual enrollment
- Opportunity to re-evaluate articulation between DOE, TCSG and USG
- Opportunity to evaluate academic credit options for CTAE courses

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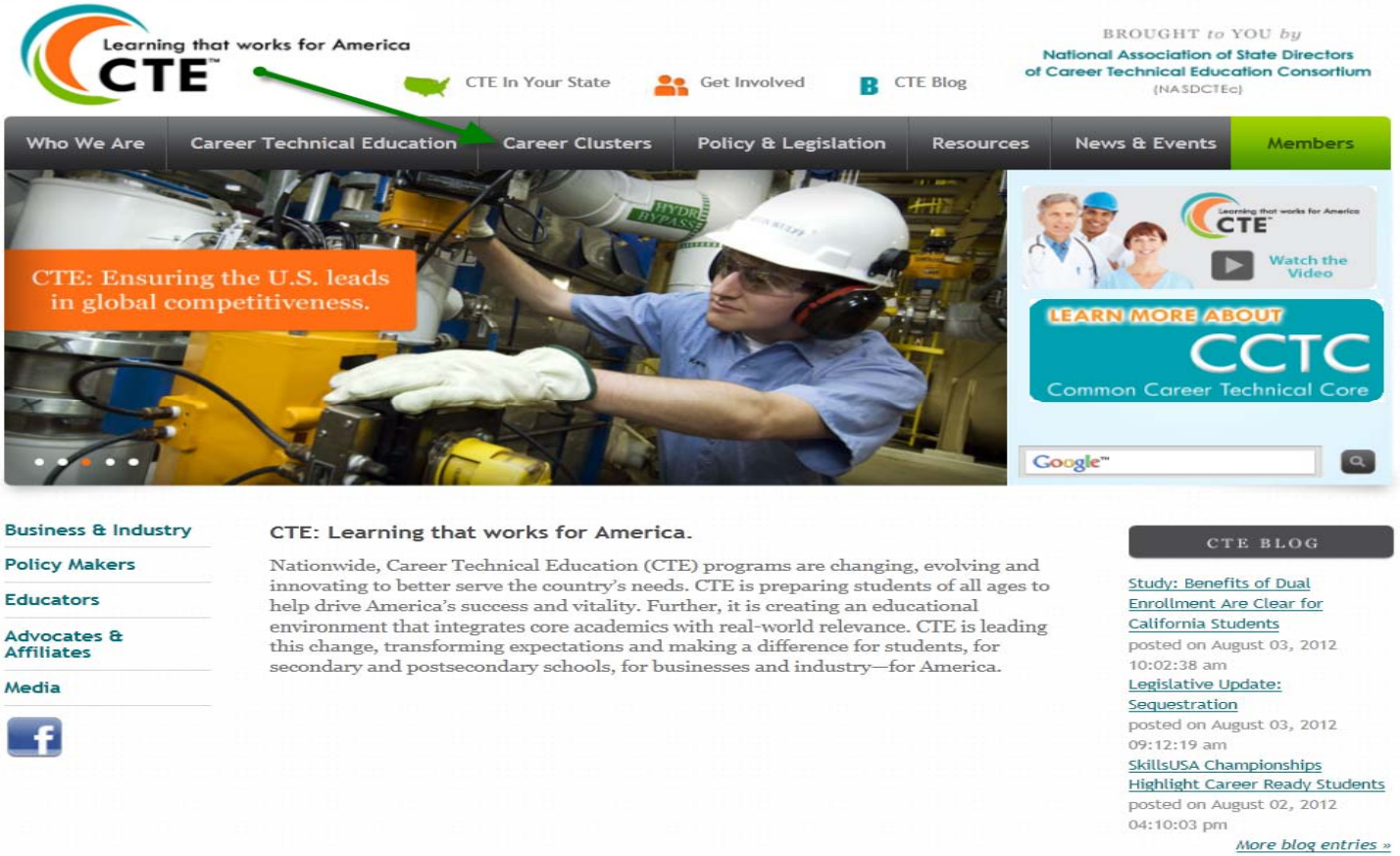

www.careertech.org

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Learning that works for America
CTE™

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Who We Are | Career Technical Education | Career Clusters | Policy & Legislation | Resources | News & Events | Members

Career Clusters At-a-Glance

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The National Career Clusters™ Framework provides a vital structure for organizing and delivering quality CTE programs through learning and comprehensive programs of study (POS). In total, there are 16 Career Clusters in the National Career Clusters™ Framework, representing more than 79 Career Pathways to help students navigate their way to greater success in college and career.

As an organizing tool for curriculum design and instruction, Career Clusters™ provide the essential knowledge and skills for the 16 Career Clusters™ and their Career Pathways. It also functions as a useful guide in developing programs of study bridging secondary and postsecondary curriculum and for creating individual student plans of study for a complete range of career options. As such, it helps students discover their interests and their passions, and empowers them to choose the educational pathway that can lead to success in high school, college and career.

And because the knowledge and skills encompass both secondary and postsecondary education, the Framework informs efforts to strengthen and improve student transition from secondary to postsecondary education. Click here for a list of the 16 Career Clusters™.

Depending on the business and industry environment, states may adapt a Career Cluster™ to reflect their state's educational objectives, standards, and economic development priorities. Click here for a closer look at the different Career Clusters™ and Pathways and access to related resources for each.

- Career Clusters™ At-a-Glance
  - The 16 Career Clusters
- Career Clusters & Pathways
- 2008 Knowledge & Skills Statements
- Green/Sustainability Statements
- Career Clusters™ Institute
- Product Store
- Programs of Study
- Publications
- Resources for Career Clusters™

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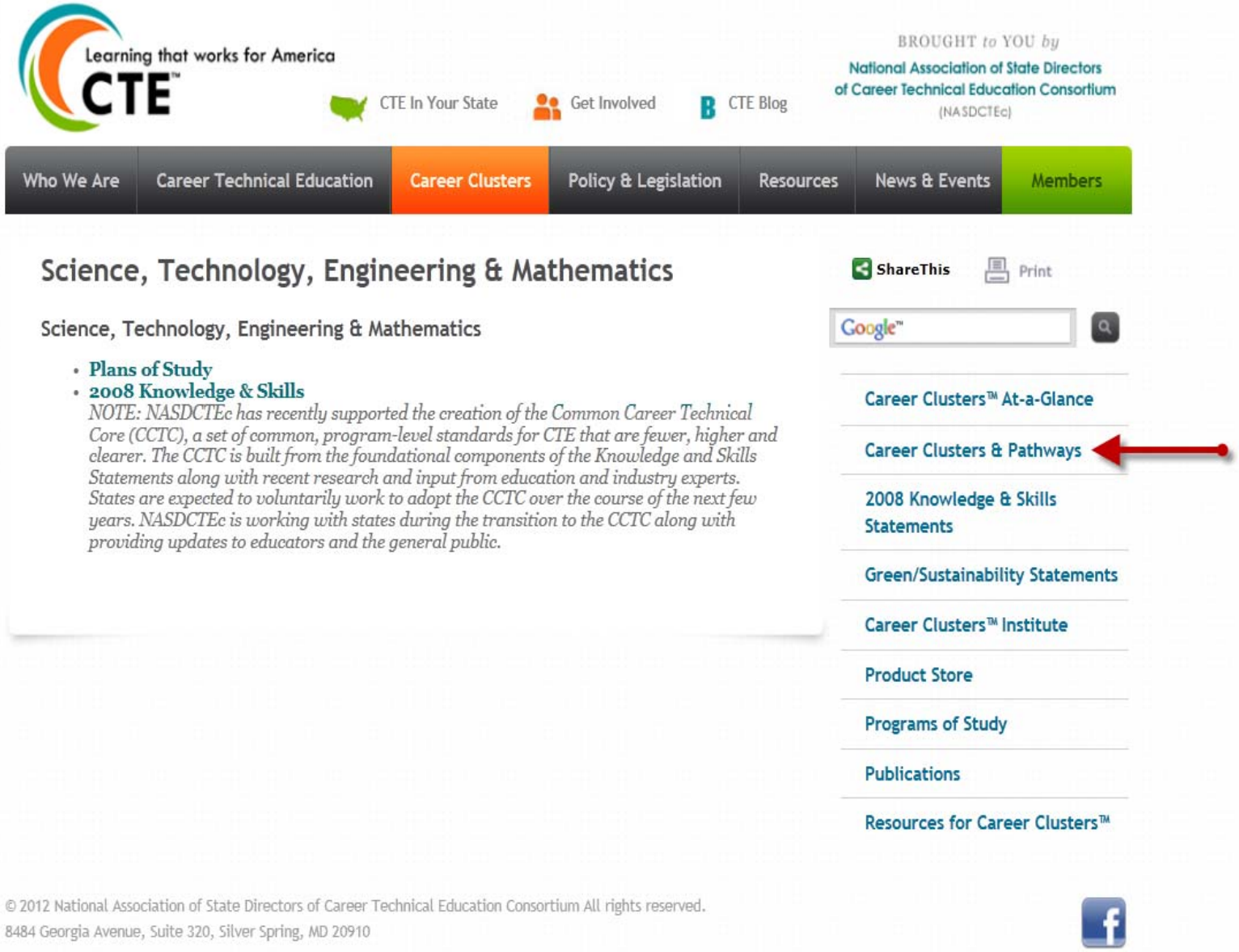

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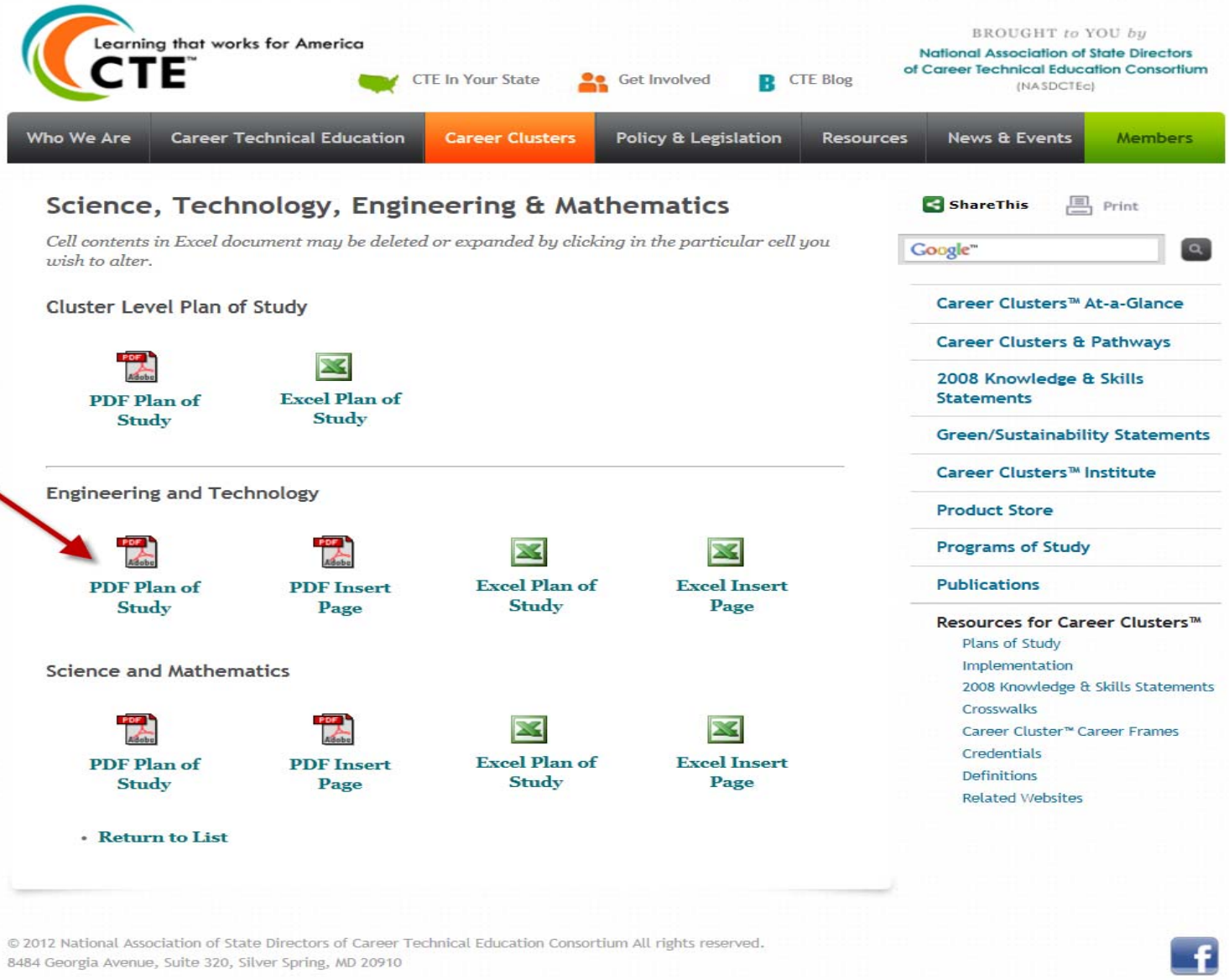

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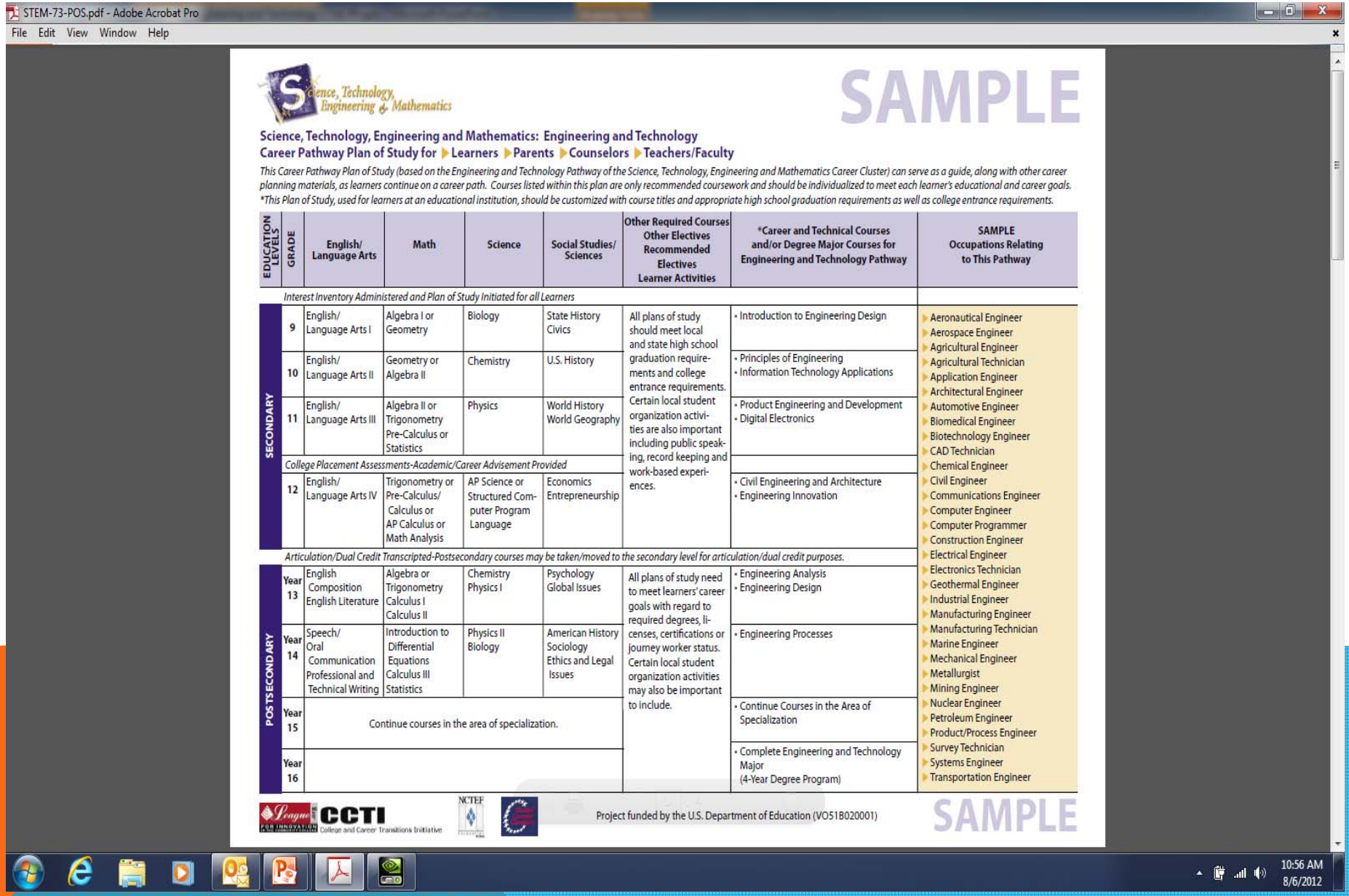

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Common Core…

- Georgia joined with 46 other states, The District of Columbia (D.C.), and territories to develop a set of core standards for kindergarten through high school in English language arts and mathematics and in grades 6-12 in literacy in science, history/social studies, and technical subjects.
- The Common Core Georgia Performance Standards (CCGPS) provide a consistent framework to prepare students for success in college and/or the 21st century workplace.
- These standards represent a common sense next step from the Georgia Performance Standards (GPS).

http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/Pages/CCGPS.aspx

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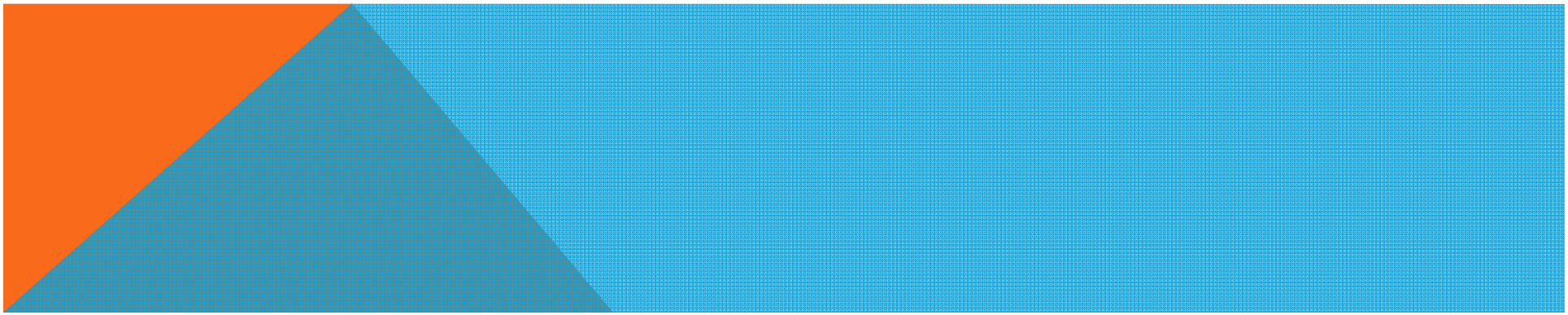
CTAE Dual Enrollment…

- 4,815 HS Students dual enrolled in college-level CTAE courses.
- 734 HS Students joint enrolled in college-level CTAE courses.



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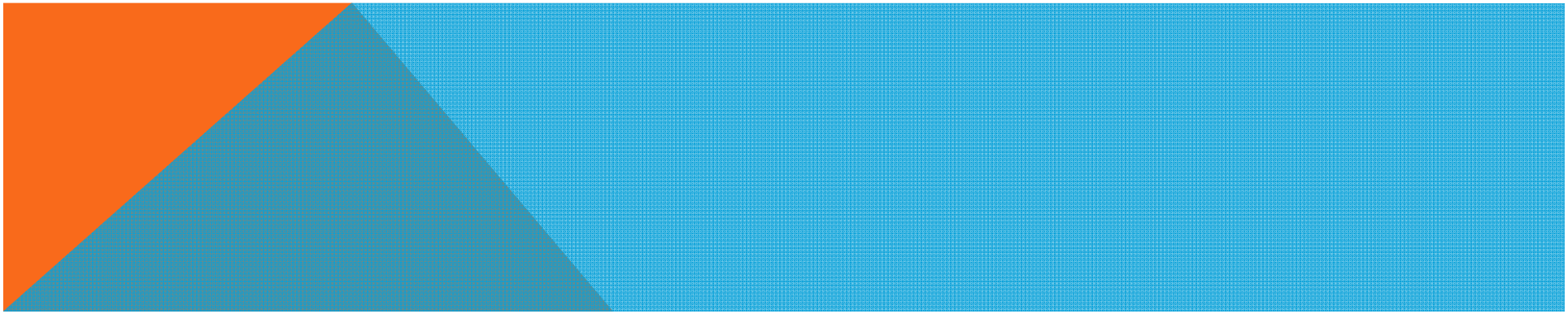
College and Career Readiness Performance Index (CCRPI)

As of March 30, 2012, Georgia was one of only 10 states to have been granted a waiver from No Child Left Behind (NCLB). The waiver enables the state to hold schools accountable and reward them for the work they do in all subjects and with all students. Georgia will begin using the College and Career Ready Performance Index (CCRPI) next school year for state accountability purposes. The CCRPI has multiple indicators to determine a school's performance, rather than using a single test score given at one point in time.



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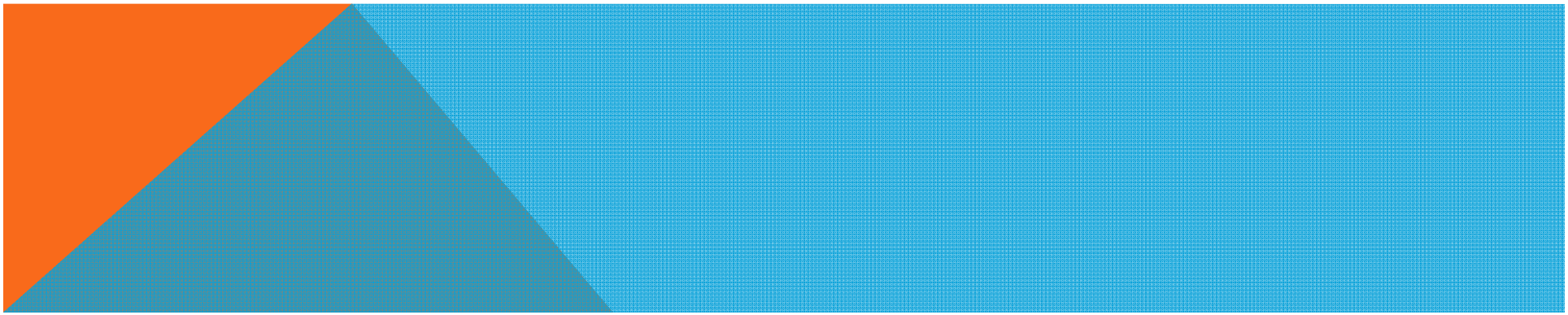
- Allows schools to be evaluated on indicators that reach beyond ELA and math scores
- Recognizes the similarity between skills needed for careers and skills needed for college
- Goes beyond the familiar ‘academic’ indicators and includes explicit career indicators
- Contains indicators that stress the importance of career awareness beginning in Kindergarten
- Elementary schools are required to teach career awareness lessons aligned with Georgia’s 17 Career Clusters and begin a career portfolio for each student that can move with the student into middle school (Exceeding the Bar indicators, 5 and 6)



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CCRPI Continued…

Middle schools are required to assist students in completing at least 2 career-related interest assessments (inventories) that will inform counselors when assisting students with their Individual Graduation Plans

Middle school counselors are required to work with each student and their parent(s) to complete the Individual Graduation Plan before the end of grade 8

High schools will be evaluated on the percent of student completing CTAE pathways, the percent of students receiving Industry-Recognized Credentials, and the percent of students passing End of Pathway Assessments

High schools will also be evaluated on the percent of students entering the Technical College System of Georgia taking all credit-bearing courses (no remediation)

High schools will also begin to work with students to ensure that by 2016-2017, all students complete a work-based learning experience or a career-related Capstone Project

For more information on CCRPI visit our website at www.gadoe.org

FY2013 EOPA TESTING GUIDELINES

Any eligible student can be tested; no grade level restrictions

Eligible students:

- Have successfully completed three or four designated courses, OR,
- Enrolled in the third or fourth (last) designated course and on track to successfully complete

FY2013 EOPA TESTING GUIDELINES

***EOPA Retest Administration*:**

- Not mandated to be offered by LEAs
- Systems that allow retest option will:
  - Offer focused remediation to students before retest
  - Allow a **single** retest opportunity for failed exam
  - Adhere to any stated "waiting periods" established by the testing agency
- Students eligible to utilize retest option:
  - Students who have successfully completed the designated courses
  - Students who failed the EOPA on the first attempt
  - Students who have participated in focused remediation

FY2013 EOPA TESTING GUIDELINES

EOPA Pre-Testing:

- EOPA tests knowledge, skills, and abilities throughout the course of pathway
- Difficult to decide in which course to dispense
- Many exams do not offer pre-test option
- Many systems can't afford pre-tests

In an effort to ensure equity for all EOPA participants, pre-testing is <u>not recommended</u>.

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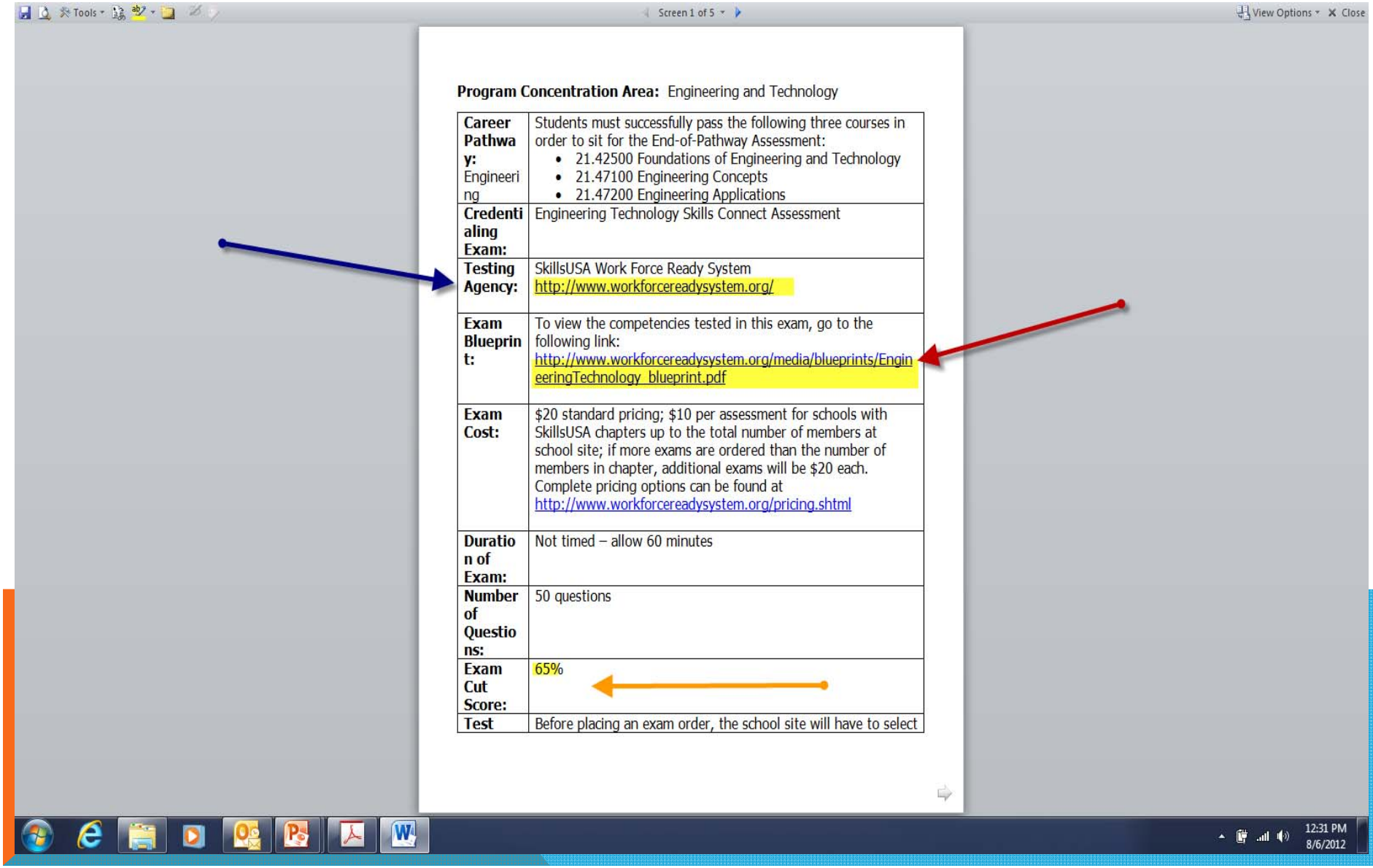
End-of-Pathway Exams – Skills USA



Program Concentration Area: Engineering and Technology

Career Pathway: Engineering	Students must successfully pass the following three courses in order to sit for the End-of-Pathway Assessment: • 21.42500 Foundations of Engineering and Technology • 21.47100 Engineering Concepts • 21.47200 Engineering Applications
Credentialing Exam:	Engineering Technology Skills Connect Assessment
Testing Agency:	SkillsUSA Work Force Ready System http://www.workforcereadysystem.org/
Exam Blueprint:	To view the competencies tested in this exam, go to the following link: http://www.workforcereadysystem.org/media/blueprints/EngineeringTechnology_blueprint.pdf
Exam Cost:	$20 standard pricing; $10 per assessment for schools with SkillsUSA chapters up to the total number of members at school site; if more exams are ordered than the number of members in chapter, additional exams will be $20 each. Complete pricing options can be found at http://www.workforcereadysystem.org/pricing.shtml
Duration of Exam:	Not timed – allow 60 minutes
Number of Questions:	50 questions
Exam Cut Score:	65%
Test	Before placing an exam order, the school site will have to select

ENGINEERING AND TECHNOLOGY

Program Concentration Area: Engineering & Technology

Career Pathway: Engineering	Students must successfully pass the following three courses in order to sit for the End-of-Pathway Assessment: • 21.42500 Foundations of Engineering and Technology • 21.47100 Engineering Concepts • 21.47200 Engineering Applications
Credentialing Exam:	Engineering Assessment, Test Code: 7773 • State-Developed Customized Assessment • Multiple-Choice Only
Testing Agency:	NOCTI http://www.nocti.org/
Exam Blueprint:	To view the competencies tested in this exam, go to the following link: http://www.nocti.org/PDFs/7773%20Engineering%20Blueprint.pdf For information regarding state exams developed by NOCTI for Georgia, go to the following link: http://www.nocti.org/StateCustomized-GA.cfm
Exam Cost:	$19.00
Duration of Exam:	Total Administration Time: 90 Minutes Multiple Session Administration This assessment can be administered in: • One 90- minute session • Two 45-minute sessions Session preference is designated at the time orders are placed.
Number of Questions:	93 questions
Exam Cut Score:	48.4

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End-of-Pathway Exams – NOCTI

NOCTI Measuring What Matters!

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NOCTI State Programs

Georgia

The CTAE Resource Network and the Georgia Department of Education have approved use of NOCTI Job Ready and Pathway assessments as part of end-of-pathway testing program. NOCTI is also the assessment provider for three state developed assessments.

Click **here** for a complete list of Georgia Attainment Inventory Assessment Information Sheets.

State Developed Assessments

NOCTI and the Georgia Department of Education worked together to customize three customized assessments. Assessment blueprints are available by clicking the links below.

Engineering
Plant Science/Horticulture
Teaching as a Profession

Administration Details
- Online administration through QuadNet, NOCTI's online assessment system
- 90-minute test time
- Administer in one 90-minute session or two 45-minute sessions
- Pre- and post-testing options available
- The performance component of NOCTI Job Ready assessment is not required

Georgia Certificate of Achievement

Students taking a NOCTI Job Ready or Pathway assessment or a state-developed test administered by NOCTI can qualify for a certificate of achievement by meeting or exceeding the established cut score.

Once score reports are processed, site coordinators access the certificates at the Client Services Center. Certificates can be printed directly from the Client Services Center or saved to a local workstation or network. Certificates from third-party organizations (e.g., A*S*K Institute, American Culinary Federation) will continue to be issued by those organizations.

Contact Information

For additional information on Georgia's End-of-Pathway Assessment Process, contact Ms. Mamie Hanson, State CTAE Assessment Coordinator, at (404) 657-6279 or via email at **mhanson@doe.k12.ga.us**.

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End-of-Pathway Exam Results – 2012 SY

Awaiting for submission to CTAE Directors….

GaDOE Contact for Credentialing:	Name: Mamie Hanson Telephone Number: (404) 657-6279 Email: mhanson@doe.k12.ga.us
GaDOE Contact for Curriculum Area:	Name: Mark Crenshaw Telephone Number: (404) 657-8316 Email: mcrenshaw@doe.k12.ga.us

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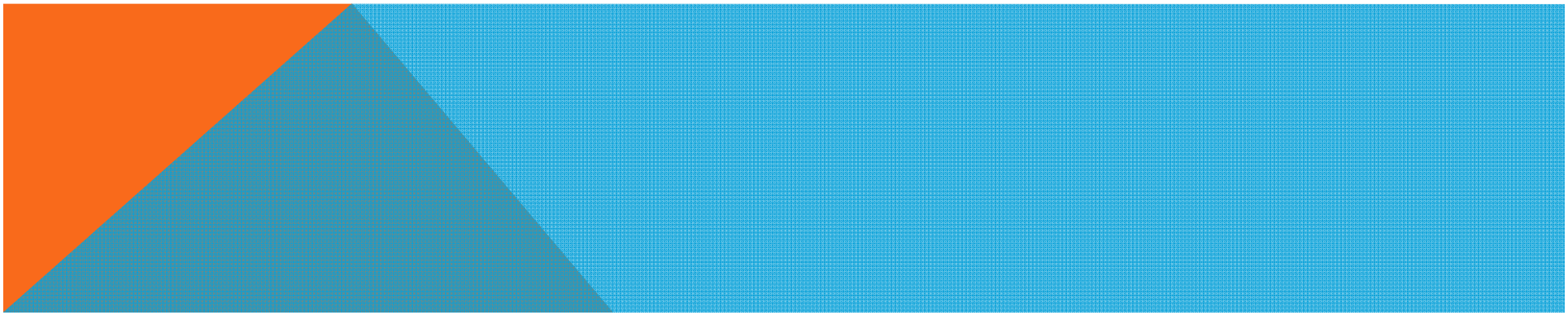
Advisory Committees

Program specific

School wide

System wide

NOTE: Teachers typically do not realize the benefits that come with a strong program advisory committee. The program, school, system, and community benefit. Most importantly students benefit.



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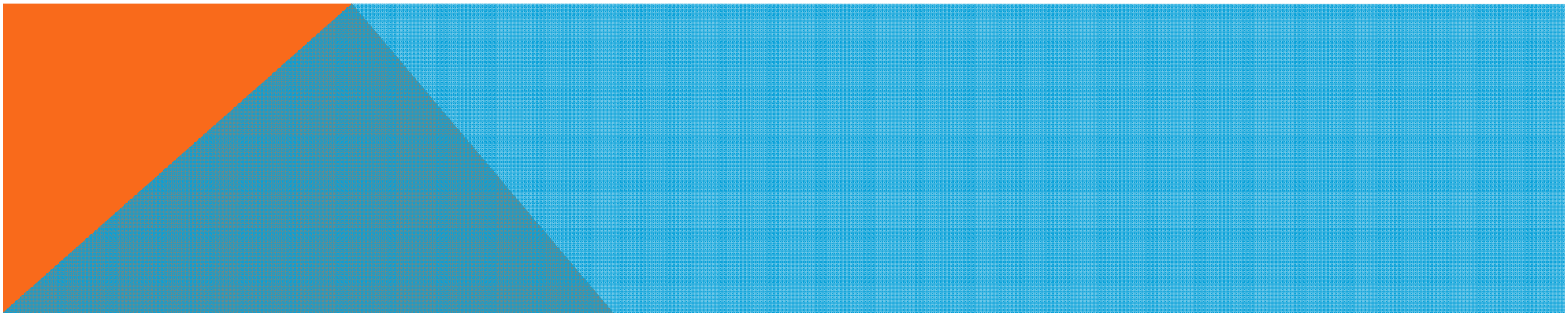
Please UPDATE your profile on CTAERN!

- This is the only way we have to COMMUNICATE with you.
- Expect changes this year as we restructure the profile to ALIGN with the pathways!



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Professional Development

CTAERN [check the site regularly for updates]

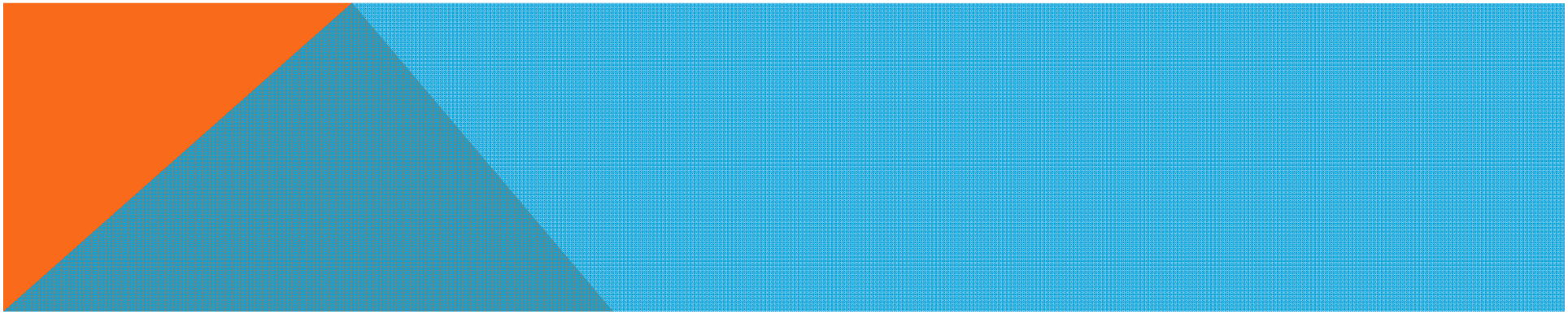
In-field professional organizations state, national, and international.

Mentors

Vendors

Local professional development [depending on size of system]

www.ctaern.org



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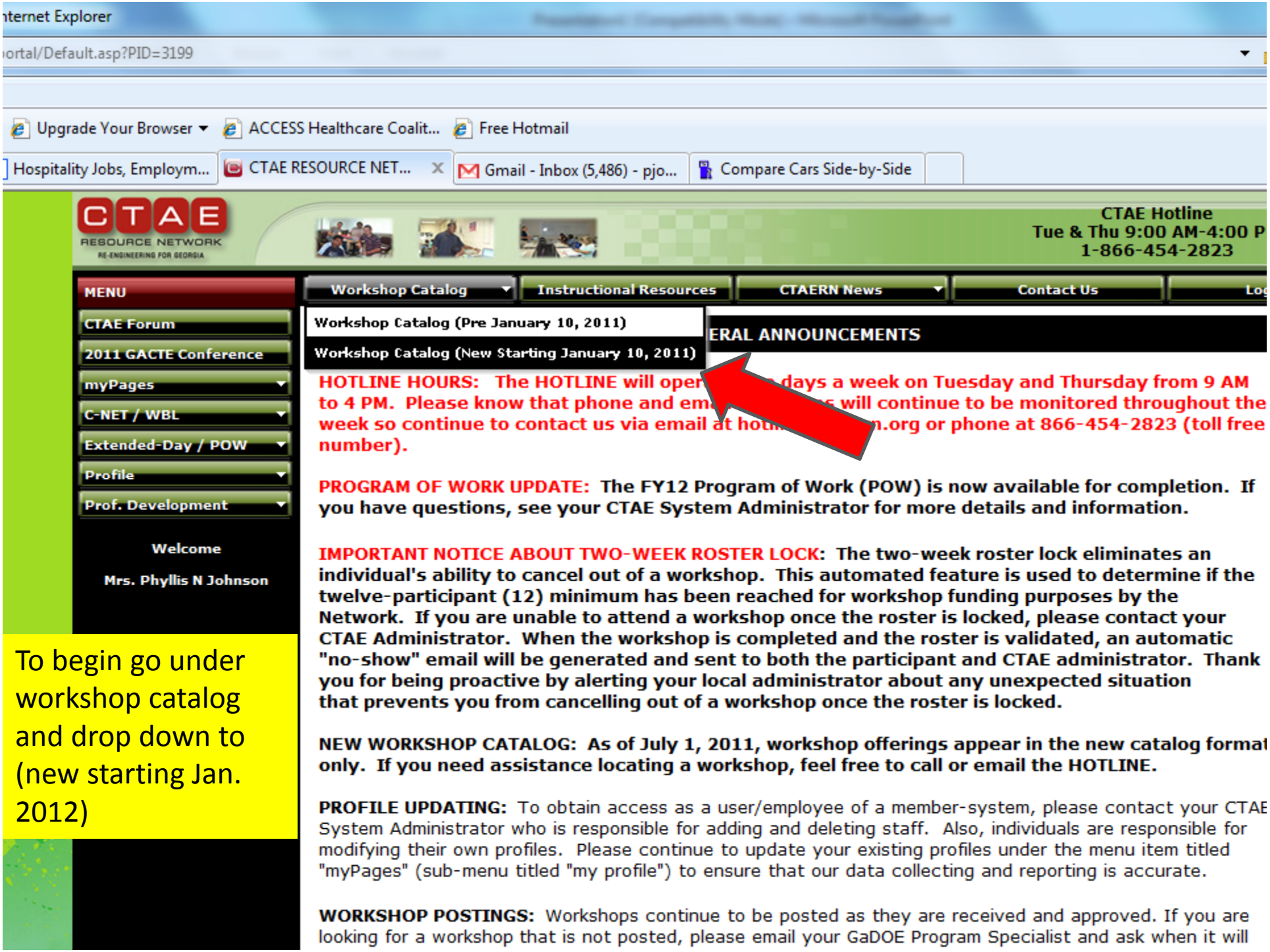
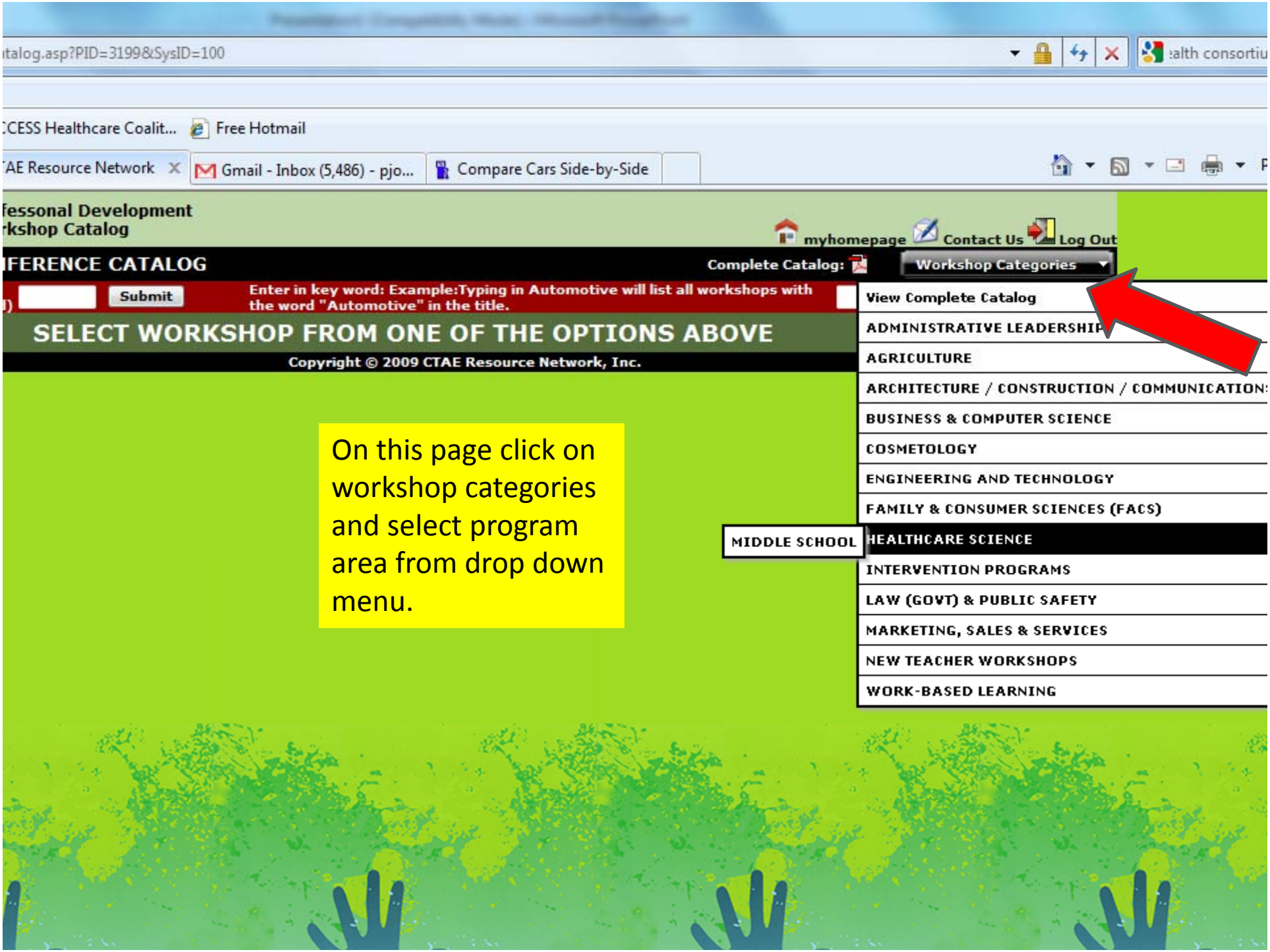
HOW TO LOCATE INFORMATION THAT IS POSTED ON WWW.CTAERN.ORG ABOUT PROFESSIONAL DEVELOPMENT THAT IS BEING OFFERED.



To begin go under workshop catalog and drop down to (new starting Jan. 2012)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Submit
Enter in key word: Example:Typing in Automotive will list all workshops with the word "Automotive" in the title.
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ENGINEERING AND TECHNOLOGY
FAMILY & CONSUMER SCIENCES (FACS)
MIDDLE SCHOOL
HEALTHCARE SCIENCE
INTERVENTION PROGRAMS
LAW (GOVT) & PUBLIC SAFETY
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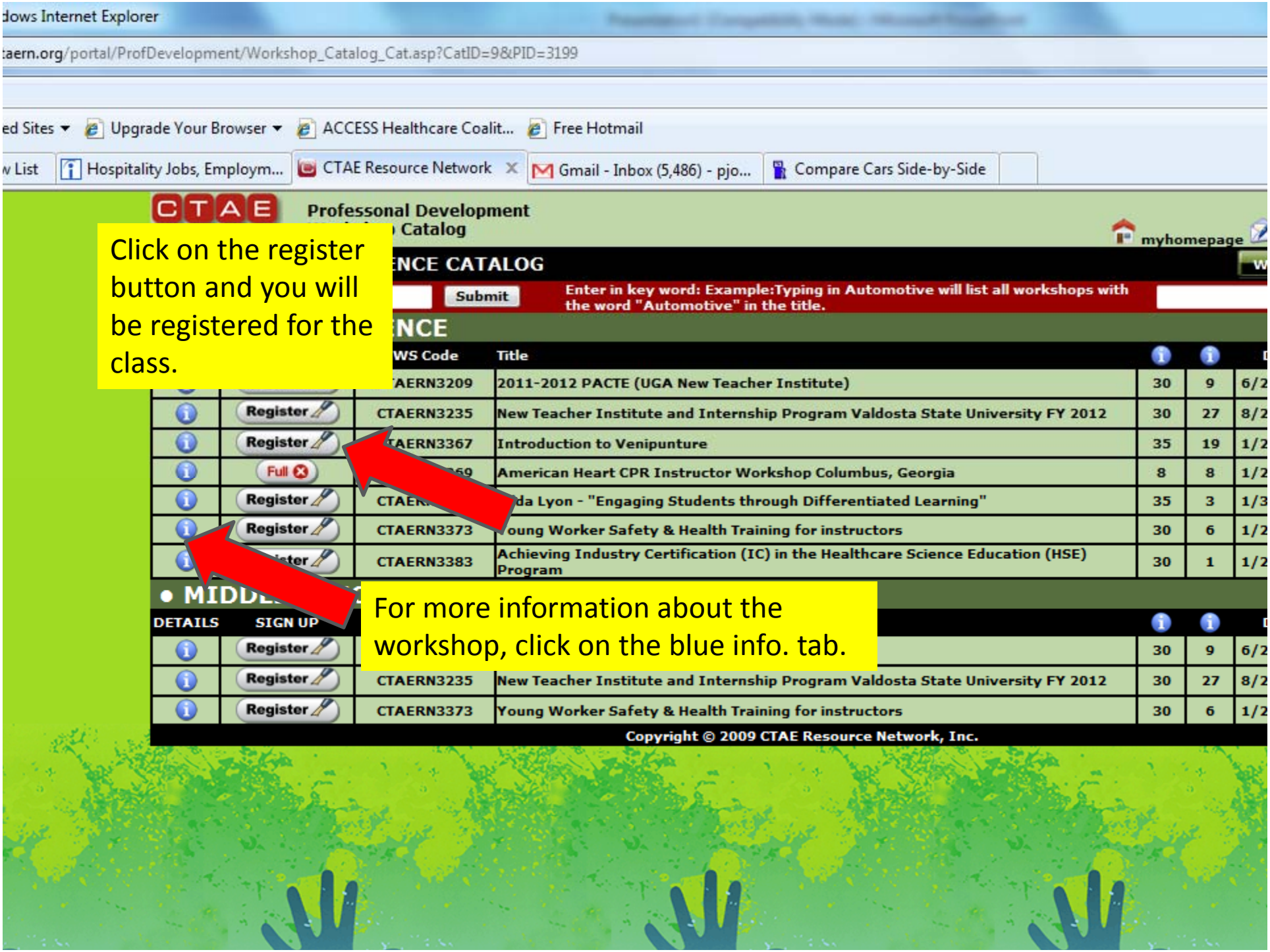
On this page click on workshop categories and select program area from drop down menu.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AERN3209
2011-2012 PACTE (UGA New Teacher Institute)
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CTAERN3235
New Teacher Institute and Internship Program Valdosta State University FY 2012
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AERN3367
Introduction to Venipunture
Full
American Heart CPR Instructor Workshop Columbus, Georgia
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da Lyon - "Engaging Students through Differentiated Learning"
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CTAERN3383
Achieving Industry Certification (IC) in the Healthcare Science Education (HSE) Program
DETAILS
SIGN UP
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CTAERN3235
New Teacher Institute and Internship Program Valdosta State University FY 2012
Register
CTAERN3373
Young Worker Safety & Health Training for instructors
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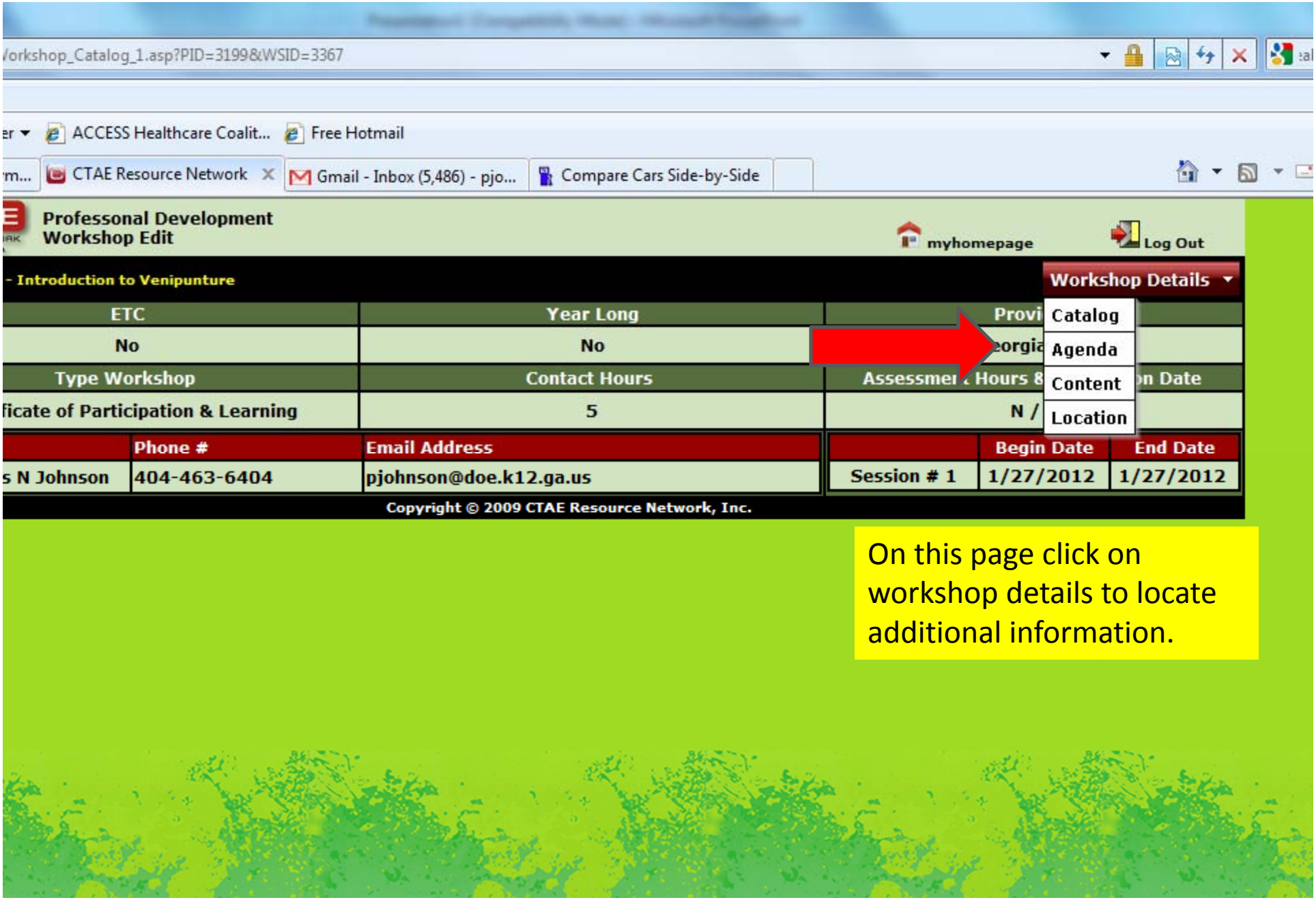
Click on the register button and you will be registered for the class.
For more information about the workshop, click on the blue info. tab.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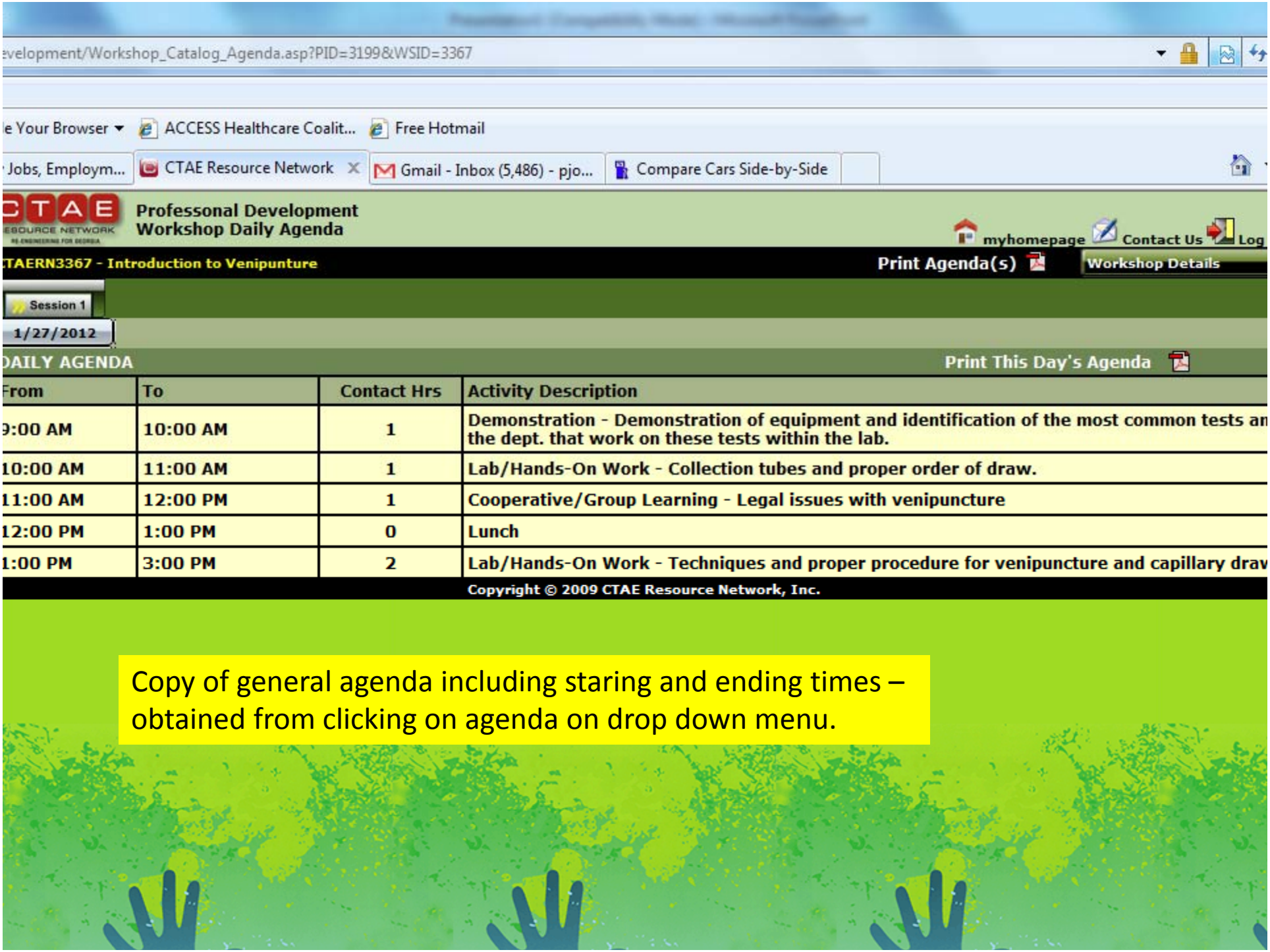
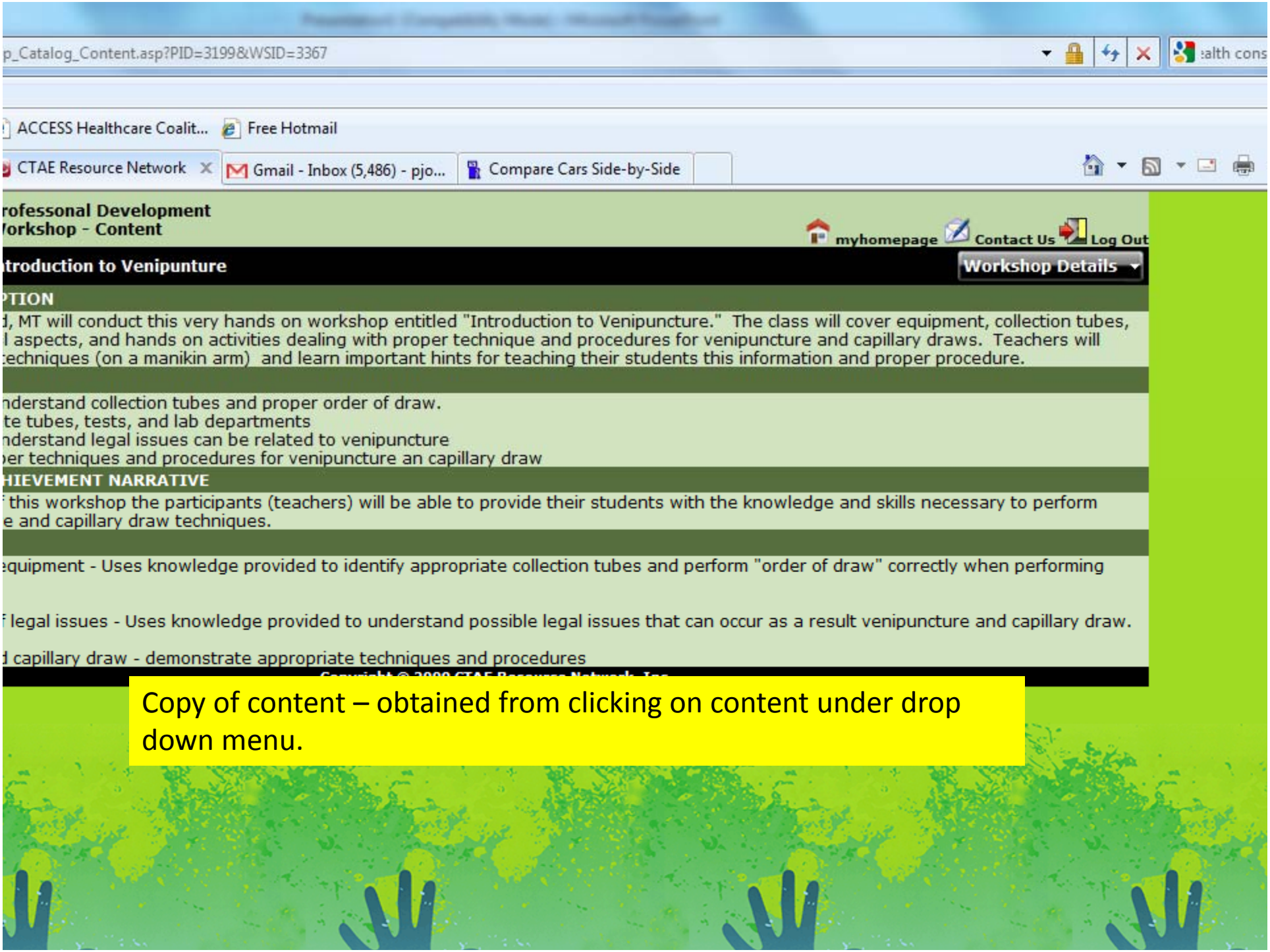
On this page click on workshop details to locate additional information.



Copy of general agenda including staring and ending times – obtained from clicking on agenda on drop down menu.



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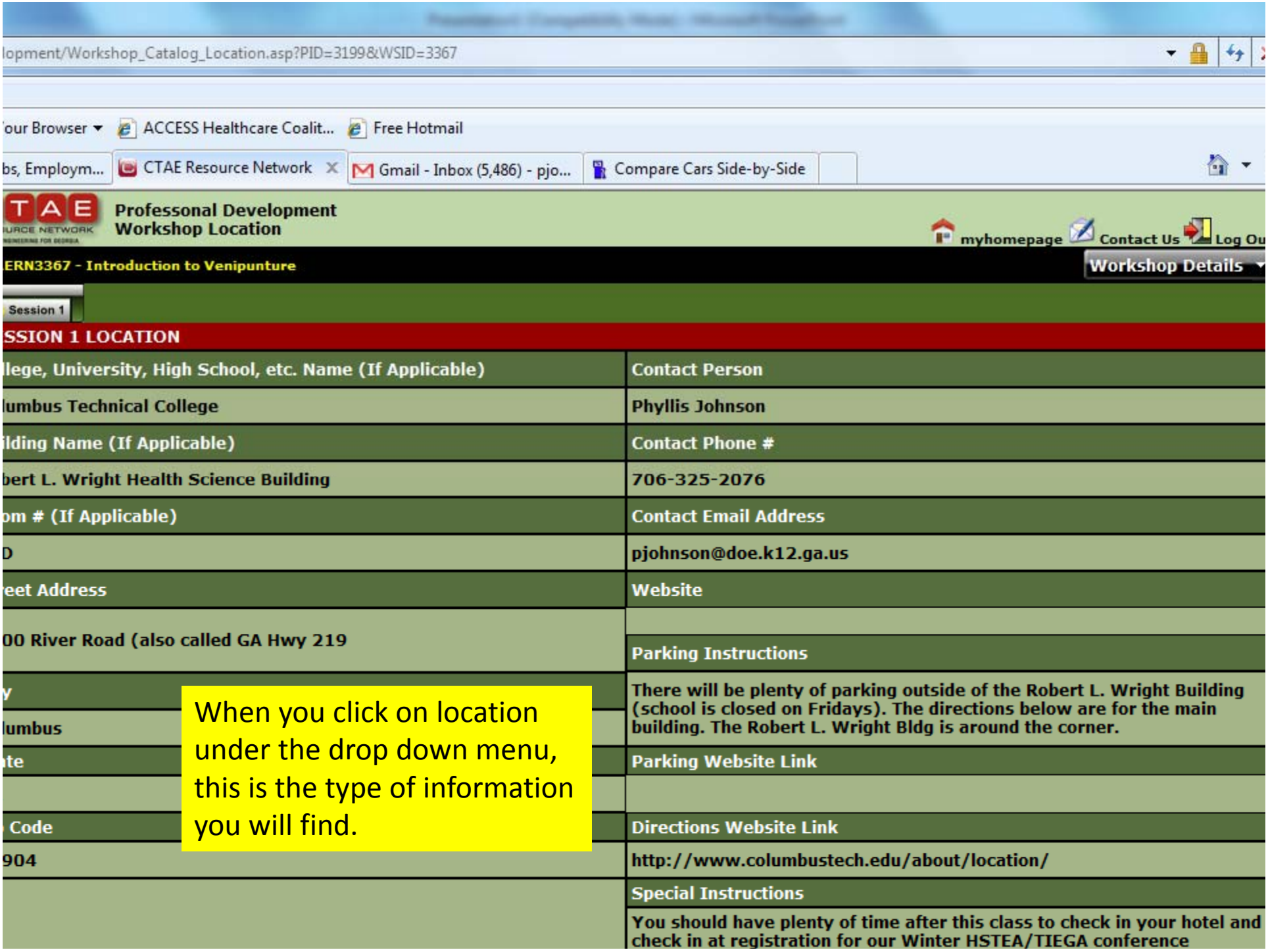
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eet Address
00 River Road (also called GA Hwy 219
y
lumbus
te
Code
904
Contact Person
Phyllis Johnson
Contact Phone #
706-325-2076
Contact Email Address
pjohnson@doe.k12.ga.us
Website
Parking Instructions
There will be plenty of parking outside of the Robert L. Wright Building (school is closed on Fridays). The directions below are for the main building. The Robert L. Wright Bldg is around the corner.
Parking Website Link
Directions Website Link
http://www.columbustech.edu/about/location/
Special Instructions
You should have plenty of time after this class to check in your hotel and check in at registration for our Winter HSTEA/TIEGA conference
When you click on location under the drop down menu, this is the type of information you will find.

ENGINEERING AND TECHNOLOGY

Perkins Compliance Review

- **Is your school scheduled for a review this year?**

Appling	10/16/2012	Elbert	11/1/2012	Paulding	9/13/2012
Barrow	10/29/2012	Evans	10/23/2012	Pierce	10/17/2012
Ben Hill	9/25/2012	Fannin	10/17/2012	Polk	11/13/2012
Brooks	10/3/2012	Forsyth	10/18/2012	Rabun	11/16/2012
Bryan	10/24/2012	Franklin	11/28/2012	Randolph	9/13/2012
Calhoun City	10/26/2012	Glynn	10/25/2012	Rockdale	11/9/2012
Catoosa	1/5/2012	Habersham	12/5/2012	Stephens	12/6/2012
Chattooga	11/27/2012	Haralson	11/14/2012	Stewart	10/29/2012
Cherokee	10/2/2012	Harris	9/24/2012	Taylor	9/25/2012
Cobb	11/15/2012	Laurens	11/13/2012	Valdosta City	10/4/2012
Coffee	9/26/2012	Marion	10/30/2012	Walton	9/27/2012
Colquitt	10/2/2012	Murray	10/30/2012	Ware	9/27/2012
Douglas	10/24/2012				

ENGINEERING AND TECHNOLOGY

Compliance Reviews Focus Areas:

- ✓ Daily schedule
- ✓ Assistance from DOE and Local Administrators
- ✓ School Improvement Model as supported by student achievement data
- ✓ Pathway Completion
- ✓ Industry Certification
- ✓ Career Related Education Documentation
- ✓ Professional Association and Professional Development
- ✓ Student Organizations
- ✓ Safety considerations in Classroom/Lab (work environment)
- ✓ Equipment and Supplies
- ✓ Reinforcement/Integration of academics
- ✓ Service to Special Populations Students
- ✓ Advisory Committees and Industry Collaboration
- ✓ Non-traditional Enrollment
- ✓ Work-Based Learning
- ✓ Career Development

ENGINEERING AND TECHNOLOGY

CTAE New Teacher Workshop

September 25-26, 2012

Macon State, Macon, GA

Tentative Agenda

DAY 1 – Tuesday, September 25th

8:30 - 9:00	David Turner – CTAE Director, GA Dept. of Education
9:00 - 9:15	Introductions and instructions
9:15 – 10:45	*Classroom management – including developing classroom rules, time management, Seating arrangements, keeping students engaged from bell to bell, and safety and lab management - *Dr. Janet Burns – GA State University*
10:45 -11:30	Implementing literacy strategies into the CTAE classroom – *Gilda Lyon, Misty Freeman, Tammy Caudell, and Phyllis Johnson – GA Dept. of Education*
11:30 -12:15	Using technology in the CTAE classroom - *Gilda Lyons – GA Dept. of Education*
12:15 -1:00	Lunch – provided
1:00-1:45	How to maximize the effectiveness of Business and Industry Advisory committees
1:45 -4:00	Master teachers and Program Specialist in each program area will work with new teachers on Program specific information and resources
4:00 -5:00	New Teacher Institute – (NTI) Presentation by providers (Those who don't have to attend NTI can spend this time networking with each other)

ENGINEERING AND TECHNOLOGY

CTAE New Teachers Workshop cont.

DAY 2 – Wednesday, September 26th

8:30-9:00	Open Session - GACTE – *Matthew Gambill – Executive Director*
9:00-9:45	Professional Standards Commission
9:45-10:45	How to utilize CTAERN – resources, professional development, POW, etc. *Skip Brown – GA Dept. of Education*
10:45-11:15	Common Core GPS
11:15-12:15	Best practices for teaching students with disabilities in the CTAE classroom
12:15-1:00	Lunch - provided
1:00-1:45	Effective Assessments – using rubrics, written tests, skills tests, presentations etc. that address various learning styles
1:45-4:00	Professional Organizations, Foundations etc.
	CTSO – Experienced advisors and Executive Directors - Web site navigation; competitive events, integration with curriculum; conferences; etc.

*This workshop is for teachers with 3 years or less experience. (Not to be Confused with NTI or PACTE).

MICROSOFT IT ACADEMY:

FREE FOR ALL GEORGIA HIGH SCHOOLS!

Provides students with the future ready technology skills needed for success in college and a career

Offered in Business & Computer Science Programs

- Links GPS to Certification
- Goal: Teacher and Student Certification

Extends BEYOND to your pathway

- Software and resources for every pathway and teacher

E-reference: digital access to over 600 technology books

DreamSpark: Top developer and designer software so students can create next-gen apps, games and tools

- Create for Xbox Live, Kinect, and more

Professional Development:

Online, FREE for all high school teachers

Reach out to your Business & Computer Science teacher to find out MORE!

ENGINEERING AND TECHNOLOGY

STEM GEORGIA WEBSITE

Visit the STEM website at:

http://www.stemgeorgia.org

ENGINEERING AND TECHNOLOGY

STEM

CTAE/STEM will be hosting a large tent during the Georgia National Fair for our 2012 State Georgia STEM Festival. We will be open for STEM activities and excitement from 10:00 am -8:00 pm on Oct. 10th, 11th, and 12th. If you have schools that would like to exhibit (it's free) and show off their programs, please have them contact me or go to http://stemgeorgia.org/georgia-stem-festival-exhibitor-application/ to register.

We are also hosting another STEM Festival for the Richmond County Schools at Augusta Technical College on Friday, Oct. 26th. If you have schools that want to show off their STEM programs, they can register at http://bit.ly/O8Qplz.

Contact: Me or Gilda Lyon, EdD
CTAE Program Specialist-STEM Coordinator
Georgia Department of Education
glyon@doe.k12.ga.us

2012 Georgia Science and Engineering Fair

The Georgia Science and Engineering Fair (GSEF) is one of a number of learning experiences that help young people meet the challenges of the future. It provides a stage from which the junior high and high school students of Georgia can demonstrate their serious contributions to the advancement of society and our way of life.

August 1, 2012	Directors' Meeting at UGA Georgia Center
February 15, 2013	Last day to complete Regional Fairs
7 days after your fair	E- or paper list of winners due at GSEF
7 days after your fair	Finalists' paper documents due at GSEF
March 1, 2013	Last day for finalists' corrections/edits and fees for GSEF qualification and printed program.
March 21-23, 2013	GSEF in Athens

The registration fee per student is $39. More information about the GSEF can be found at their webpage (www.georgiacenter.uga.edu/gsef) or by contacting the GSEF Program Coordinator Mrs. Christine Burgoyne by calling the GSEF phone line (706-542-3554 or 706-542-6473).

ENGINEERING AND TECHNOLOGY

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Engineering byDesign™
STEM Center for Teaching and Learning™
Consortium of States
EbD Pathway Extensions™ NEW!
Technological Literacy Standards (STL)
Invention, Innovation, Inquiry (I3)
Human Exploration Project

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High school and university students enter today.
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DESIGN CHALLENGE

Engineering byDesign™ (EbD)
A Standards-Based Model Program

"The Engineering byDesign™ Program is built on the belief that the ingenuity of children is untapped, unrealized potential that, when properly motivated, will lead to the next generation of technologists, innovators, designers, and engineers."

The International Technology and Engineering Educators Association's STEM Center for Teaching and Learning™ has developed the only standards-based national model for Grades K-12 that delivers technological literacy. The model, Engineering byDesign™ is built on Standards for Technological Literacy (ITEEA); Principles and Standards for School Mathematics (NCTM); and Project 2061, Benchmarks for Science Literacy (AAAS).

CORE PROGRAM	K–2	EbD-TEEMS™ *Technology Starters/KITS*	
	3–5	EbD-TEEMS™ *I²/KITS*	
	6	*Exploring Technology*	18 weeks
	7	*Invention and Innovation*	18 weeks
	8	*Technological Systems*	18 weeks
	9	*Foundations of Technology*	36 weeks
HS Choices	10–12	*Technology and Society*	36 weeks
	10–12	*Technological Design*	36 weeks
	11–12	*Advanced Design Applications* *	36 weeks
	11–12	*Advanced Technological Applications* *	36 weeks
	11–12	*Engineering Design (Capstone)*	36 weeks

Built on the constructivist model, students participating in the program learn concepts and principles in an authentic, problem-based environment. A network of teachers (EbD™ Network) has been selected to collaborate and conduct action research in order to better understand the complexities of student learning and to help all students succeed and be prepared for the global society in which they will grow up.

Mission

We live in a technological world. Living in the twenty-first century requires much more from every individual than a basic ability to read, write, and perform simple mathematics. Technology affects every aspect of our lives, from enabling citizens to perform routine tasks to requiring that they be able to make responsible, informed decisions that affect individuals, our society, and the environment.

Citizens of today must have a basic understanding of how technology affects their world and how they exist both within and around technology. Technological literacy is fundamentally important to all students. Technological processes have become so complex that the community and schools collaborate to provide a quality technology program that prepares students for a changing technological world that is progressively more dependent on an informed, technologically literate citizenry.

Vision

The ITEEA model technology program is committed to providing technological study in facilities that are safe and facilitate creativity, enabling all students to meet local, state, and national technological literacy standards. Students are prepared to engage in additional technological study in the high school years and beyond. Students will be prepared with knowledge and abilities to help them become informed, successful citizens who are able to make sense of the world in which they live. The technology program also enables students to take advantage of the technological resources in their own community.

Goals

- Provide a standards-based K-12 program that ensures that all students are technologically literate.
- Provide opportunities for all students without regard to gender or ethnic origin.
- Provide clear standards and expectations for increasing student achievement in math, science, and technology.
- Provide leadership and support that will produce continuous improvement and innovation in the program.
- Restore America's status as the leader in innovation. Provide a program that constructs learning from a very early age and culminates in a capstone experience that leads students to become the next generation of technologists, innovators, designers, and engineers.

Organizing Principles

The program is organized around seven principles. These principles are very large concepts that identify major content organizers for the program. In order of importance, the seven organizing principles are:

1. Engineering through design improves life.
2. Technology has and continues to affect everyday life.
3. Technology drives invention and innovation and is a thinking and doing process.
4. Technologies are combined to make technological systems.
5. Technology creates issues that change the way people live and interact.
6. Technology impacts society and must be assessed to determine if it is good or bad.
7. Technology is the basis for improving on the past and creating the future.

STEM and IT Pathways

The EbD™ Program is a model used by schools developing themes in the STEM and IT Clusters that are seeking to increase all students' achievement in technology, science, mathematics, and English through authentic learning. The program is built on constructivist models and creates awareness and competence over time as it builds on learned knowledge and skills--aligning closely with the Cluster Knowledge and Skills in both the STEM and IT Clusters.

The EbD™ Program was designed to maintain integrity through two delivery scenarios.

Pathway program, where schools adopt the articulated sequence of courses in a STEM and/or an IT-themed academy.

Modularizing the components and adapting the design themes to support the STEM, IT, or other academy models. In this scenario, as in many career-themed academy models, some modification is required to ensure themes are aligned with the Cluster Knowledge and Skills.

EbD™
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http://www.iteea.org/EbD/ebd.htm

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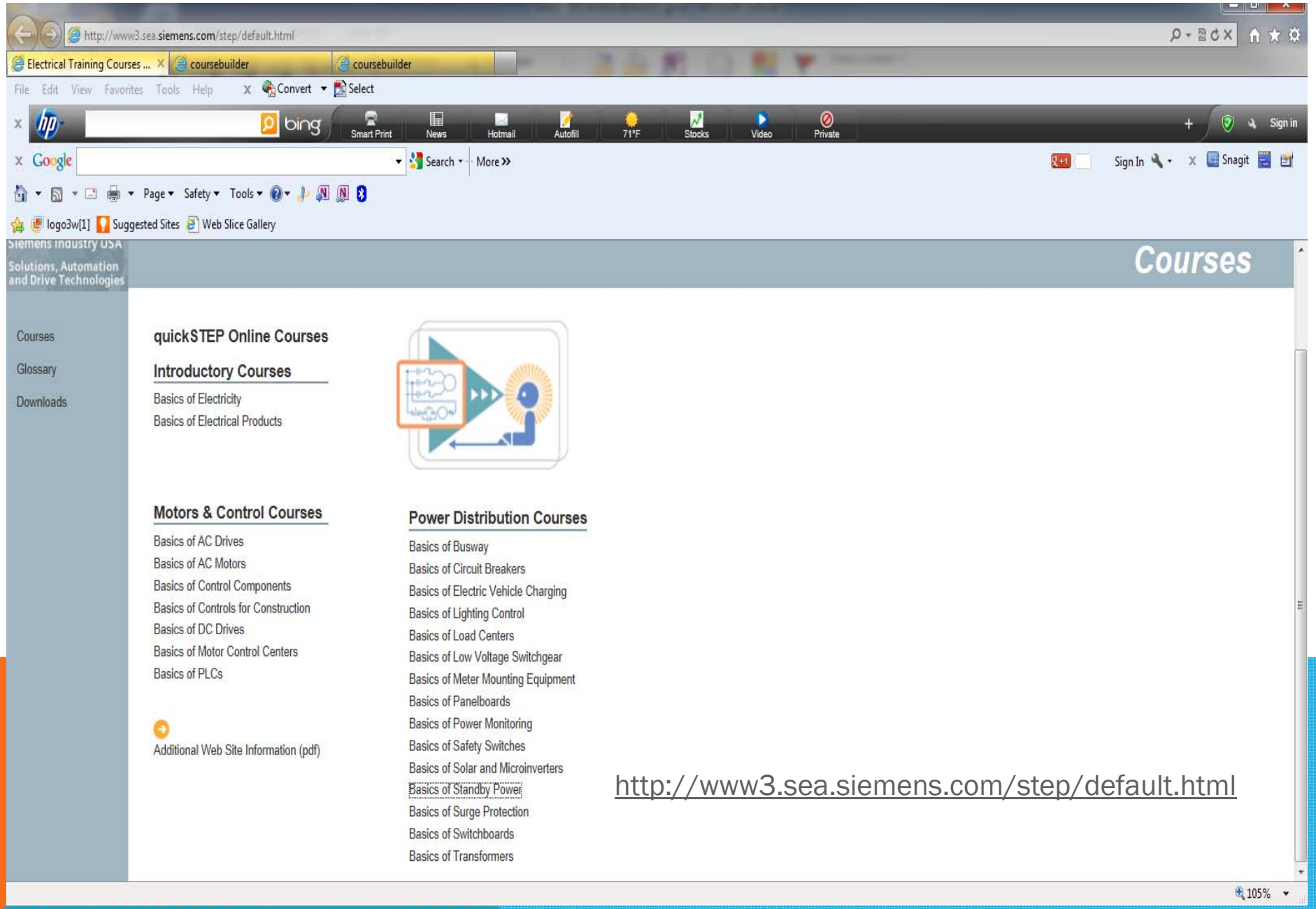

http://www3.sea.siemens.com/step/default.html

ENGINEERING AND TECHNOLOGY

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ENGINEERING AND TECHNOLOGY

Workforce Education @ University of Georgia

The UGA Workforce Education program offers a wide range of graduate degrees designed to help CTAE educators to think and address 21st century work preparation. The UGA Workforce Education program has consistently ranked in the top five graduate technical vocational programs in the country by *US News & World Report*. Through our graduate degrees, students are able to increase and/or update knowledge and skills, maintain certification requirements, pursue professional development or prepare for leadership opportunities.

Our degree options include:

- **Online MED** – 100% online (next cohort starting Spring 2013)
- **MAT** – *Master of Arts for Teaching* – geared to those individuals who need initial certification
- **EdS** – *Specialist in Education* – beyond the masters but without the heavy emphasis on research
- **EdD** – *Doctor of Education* (Athens) – prepares individuals for leadership and other roles in CTAE
- **EdD** – *Doctor of Education* (Online/Hybrid) – practitioner based using a blend of face-to-face & online learning
- **PhD** – *Doctor of Philosophy* (Athens) – career preparation where research & scholarship are central activities

Contact Us for Further Information:

http://www.coe.uga.edu/welsf/files/2010/04/WELSF-MED-Online-Check-Sheet.pdf

Application deadlines are soon approaching.

Robert Wicklein – Graduate Coordinator, (wickone@uga.edu); (706) 542-4503

Department Website – www.coe.uga.edu/welsf/

Scholarly Excellence for the CTAE Educator

ENGINEERING AND TECHNOLOGY

Online MED	MAT	EdS	Hybrid EdD Griffin	EdD	PhD
Cohort Based – 20 Closed Enrollment	Open Enrollment	Open Enrollment	Cohort Based – 20 Closed Enrollment	Open Enrollment	Open Enrollment
36 credit hours – 2 Courses/Term	48 credit hours – 1-3 Courses/Term	36 credit hours – 2 Courses/Term	48 credit hours – 2 Courses/Term	48 credit hours – 1-4 Courses/Term	60 credit hours – 1-4 Courses/Term
2 yr. Duration	2-4 yr. Duration	2 yr. Duration	3 yr. Duration	3-6 yr. Duration	3-7 yr. Duration
Prescriptive Curriculum	Prescriptive Curriculum	Semi-Prescriptive Curriculum	Prescriptive Curriculum	Semi-Prescriptive Curriculum	Semi-Prescriptive Curriculum
Application Deadline – 11/15	Application Deadline – 7/1; 11/15; 5/1	Application Deadline – 7/1; 11/15; 5/1	Application Deadline – 3/15	Application Deadline – 3/15	Application Deadline – 3/15

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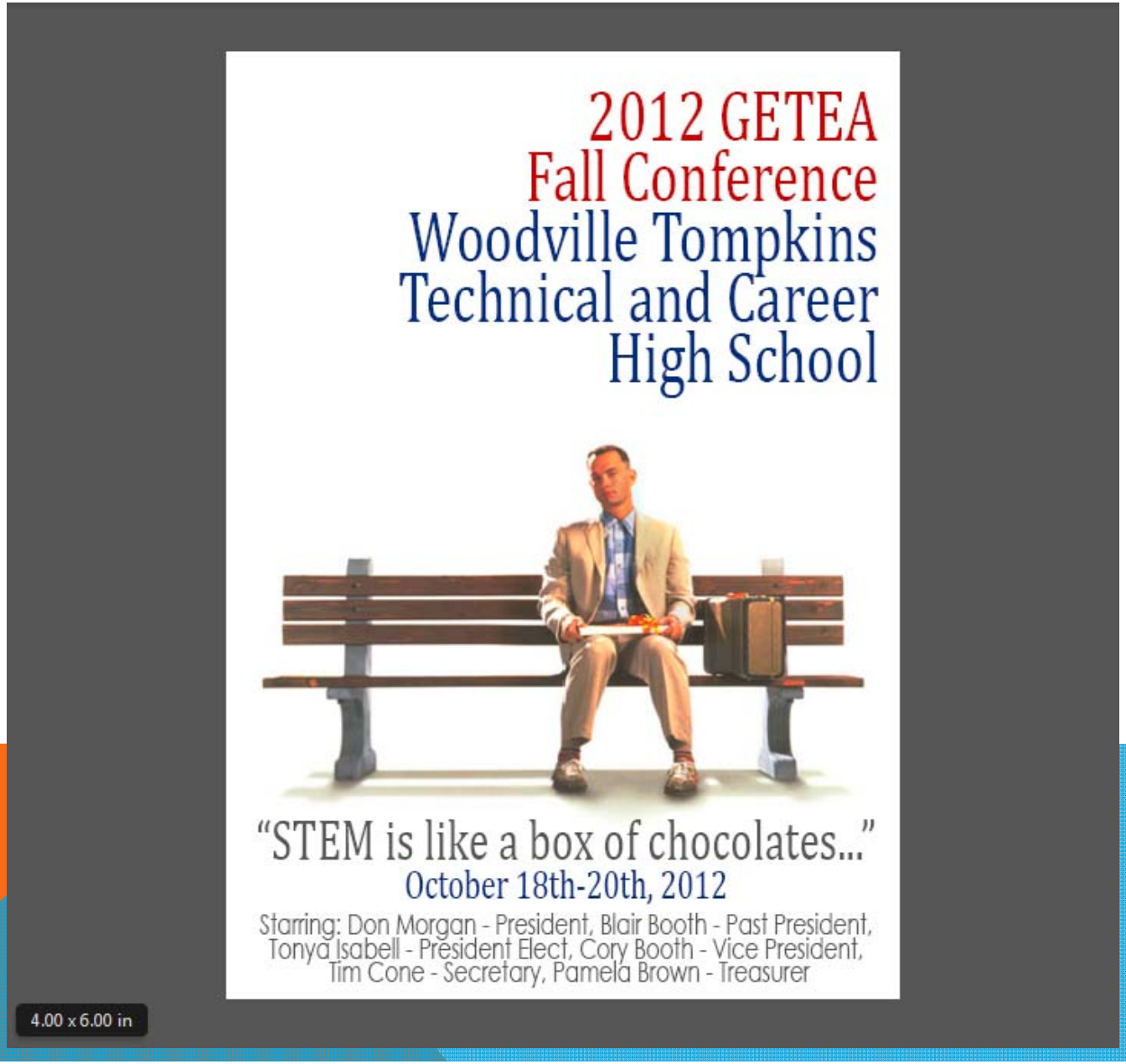

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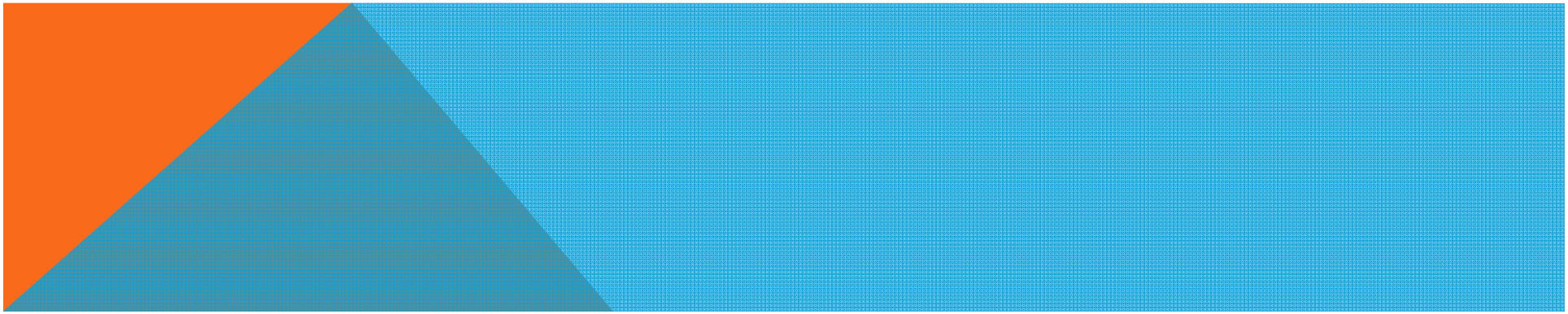


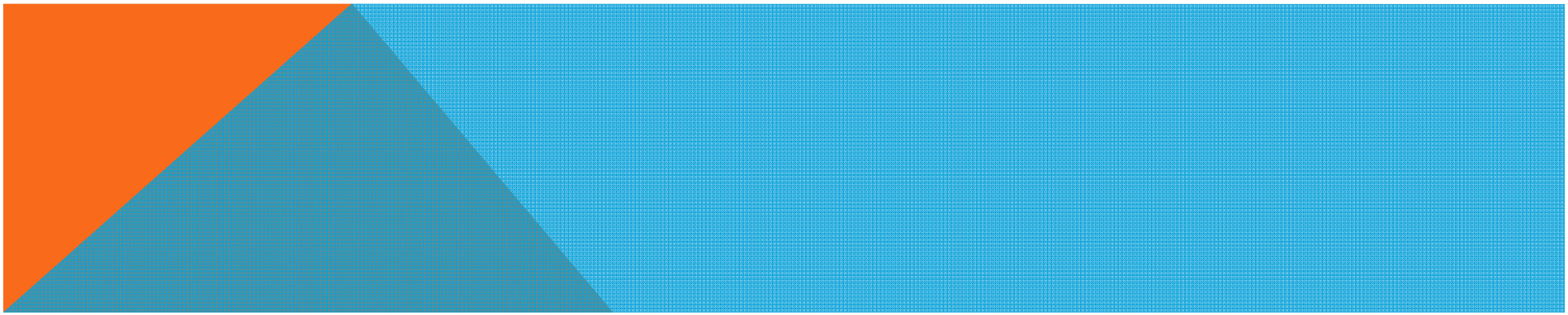
ENGINEERING AND TECHNOLOGY

Curt Johnson – Lowndes County Teacher of the Year

As Lowndes County School Superintendent Wes Taylor might put it, Johnson's a beacon of hope. With all of the changes and challenges happening in public education, Johnson is a light at the end of the tunnel for the possibilities that are available to a child when they have a caring and dedicated teacher.

Pine Grove MS

ENGINEERING AND TECHNOLOGY

Remember….

As teachers in a non-academic field, next to teaching and “turning our kids on” to engineering/manufacturing/energy, etc…, it must be our very next goal to educate and “turn on” the necessary supporters of our program areas!