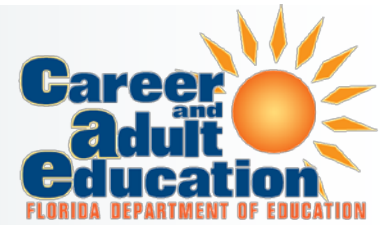


Information Technology Science, Technology, Engineering & Math Career Cluster Update

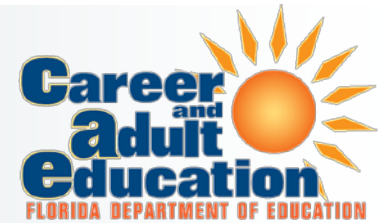
FACTE Conference
July, 2011

IT Program Update



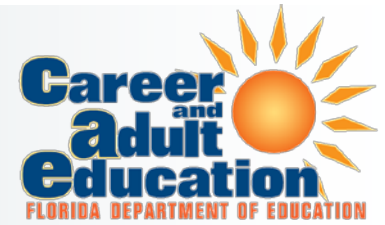
- Web Development Curriculum Overhaul
 - Program implemented for 2011-12
 - Good reactions from around the state
- Information Technology
 - Being replaced by Applied Information Technology
 - Three-course core followed by elective/optional courses
 - Database
 - Programming
 - Web Development
 - Multimedia
 - Networking
 - Cybersecurity
 - Current program goes into teach-out mode beginning 2012-13
 - Introduction to Information Technology course (8207310) remains as before
- Applied Cybersecurity
 - 4-Year program taking shape
 - High profile committee
 - Cybersecurity certifying agencies (CompTIA & (ISC)²)
 - Students to access FACET cyber range
 - Current hope is to pilot later this year

IT Program Update



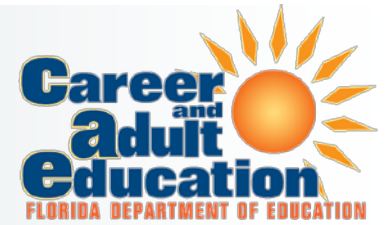
- Business Computer Programming
 - Being replaced by four new programs
 - Java Programming & Application Development
 - .NET Programming & Application Development
 - Database Programming & Application Development
 - Web Application Development
 - First four courses (600 hours) form programming core
 - Targets IEEE industry certification, following by MS
 - Current program goes into teach-out mode beginning 2012-13
 - Introduction to Information Technology course (8207310) remains as before
- PC Support Services
 - Being replaced by Technology Support Services
 - Computing environment has evolved
 - Tier 1 support must now embrace newer technologies
 - Driven by industry experts (including The Geek Squad)
 - Current program goes into teach-out mode beginning 2012-13
- ICT Essentials
 - Information & Communications Technology (ICT)
 - Middle school series of courses
 - Spans Office, web, digital, and Web 2.0 technologies
 - Rigor and scope surpasses IC3 certification
 - Substitute for IIT under consideration

STEM Program Update



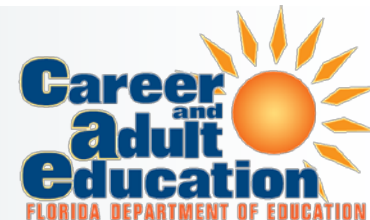
- Applied Robotics
 - Four-year Program (Volusia County Spearheading Effort)
 - Covers both stationary and autonomous, mobile robots
 - Focus on design, control, and application
 - High level of integration of math and physics
 - Artificial Intelligence
 - Targeted for 2012-13 Release
- STEM Cluster Under Review
 - Structure and organization
 - Range and scope of courses
 - Redundancy targeted for elimination
 - Statewide committee being formed

New District Certifications



- Driven by new programs
 - Older legacy certifications being phased out
 - Qualified teachers can still qualify under new certifications
 - Facilitated by programs expiring via teach-out
- Computer Programming (COMP PROG 7 G)
- Cybersecurity (CYBER TECH 7 G)
- Digital Media (DIGI MEDIA 7 G)
- Information Technology (INFO TECH 7 G)
- Web Development (WEB DEV 7 G)

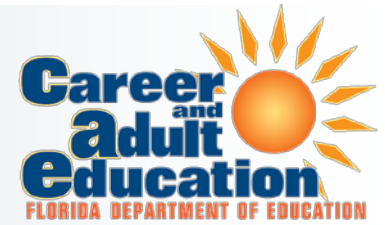
Industry Certifications



- ▶ **CIW Internet Business Associate (PROSO016)**
 - Aligns with Introduction to Information Technology
 - Applies to many programs
- ▶ **CIW JavaScript Specialist (PROSO017)**
- ▶ **CIW Network Technology Associate (PROSO018)**
- ▶ **CIW Site Development Associate (PROSO020)**
- ▶ **CIW Web Design Professional (PROSO021)**
- ▶ **CIW Web Design Specialist (PROSO022)**
- ▶ **CIW Web Development Professional (PROSO023)**
- ▶ **CIW Web Foundations Associate (PROSO024)**
- ▶ **Engineering Core Certification (FLENG001)**

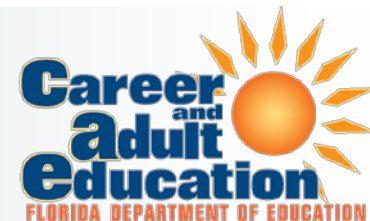
- ▶ **Microsoft Certified Desktop Support Technician (MCDST) (MICRO006)**
Expired
 - Replaced by Microsoft MCITP: Enterprise Support Technician (MICRO033)
 - MICRO033 being tracked for inclusion on 2012–13 CAPE List

Professional Development



- ▶ Professional Development Institute (PDI)
 - Funded by Perkins
 - Managed by College of Central Florida
- ▶ Mini-grants for full-time CTE teachers to achieve training/certification on DOE-approved industry certifications.
- ▶ Expanded on-line offerings
- ▶ Extended to Middle School CTE teachers
- ▶ <http://www.cf.edu/departments/instruction/workforce/perkins.htm>

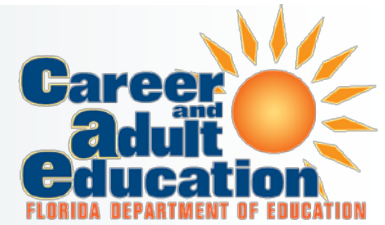
Gold Standard Articulation



CODE	Certification Title	Credits	Degree Program
AFHDI001	Certified Medical Transcriptionist	3	Health Information Management
AMSTL003	Global Logistics Associate	12	Supply Chain Management
CARCH002	Chief Architect Certified Apprentice	3	Architectural Design and Construction Technology
CISCO011	Cisco Certified Network Associate Security (CCNA® Security)	3	IT Security
CISCO011	Cisco Certified Network Associate Security (CCNA® Security)	3	Networking Services Technology
CISCO011	Cisco Certified Network Associate Security (CCNA® Security)	3	Computer Engineering Technology
CISCO018	Cisco Certified Internetwork Expert Routing and Switching (CCIE® Routing and Switching)	3	Computer Engineering Technology
COMPT003	CompTIA Convergence+	3	Computer Engineering Technology
COMPT005	CompTIA Linux+	3	Computer Programming and Analysis
COMPT007	CompTIA Project+	3	Technology Project Management
GRBCI001	LEED Professional Accreditation	3	Building Construction Technology
GRBCI001	LEED Professional Accreditation	3	Construction Management Technology
ISCET002	Electronics Systems Associate (ESA)	3	Electronics Engineering Technology
MICRO069	Microsoft Office Specialist (MOS) Bundle (3 of 5)	3	Office Administration
NCCER038	NCCER – Electrical – Level 2	3	Construction Electricity Management
SUNMI001	Sun Certified Java Programmer	3	Computer Programming and Analysis
SUNMI002	Sun Certified Java Associate	3	Computer Programming and Analysis

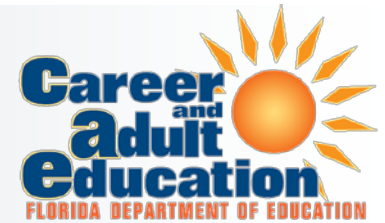
► http://www.fldoe.org/workforce/dwdframe/artic_frame.asp

Middle School Initiative



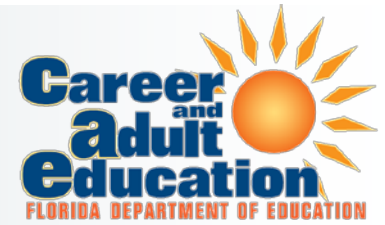
- ▶ Succession of 6th, 7th, and 8th grade courses
- ▶ Directly related to career cluster
- ▶ Sixth Grade
 - One course that addresses all career clusters
- ▶ Seventh Grade
 - Introduction to...
 - One course per cluster to address pathways within the cluster
 - Available in half and full-year versions
- ▶ Eighth Grade
 - Exploring ...
 - One or more courses per cluster to explore preparatory technical info related to one or more pathways with each cluster

Florida ListSerts



- ▶ Three email-based forums intended to encourage the free interchange of ideas, best practices, and communication among IT, STEM, and PLTW stakeholders in Florida.
 - BTE – Serves Business and IT education stakeholders
 - STEM – Serves STEM education stakeholders
 - PLTW – Serves PLTW education stakeholders
- ▶ Membership on the lists is voluntary and limited to:
 - Florida Business/IT and technology/STEM/PLTW teachers
 - District supervisors and resource teachers
 - Community college or university faculty or administrators
 - Interested educators with a stake in the ListServ focus
- ▶ Vendors may not be included
- ▶ Personal email during summer okay if submitted with verifiable work email
- ▶ Contact Duane Hume with work email address.

Contact Information



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