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CAREER & TECHNICAL EDUCATION (CTE) TODAY

Strengthening the Pipeline to College & Careers



CAREER & TECHNICAL E D U C A T I O N



SECONDARY EDUCATION CAREER PATHWAYS

17 CAREER CLUSTERS

Agriculture, Food & Natural Resources

Architecture & Construction

Arts, A/V Technology & Communication

Business Management & Administration

Education & Training

Energy

Engineering & Technology Education

Finance

Government & Public Administration

Health Science

Hospitality & Tourism

Human Services

Information Technology

Law, Public Safety & Security

Manufacturing

Marketing, Sales & Service

Transportation,
Distribution, &
Logistics

CAREER PATHWAY

OVERVIEW



M-DCPS offers over 120 CTE Pathway programs at 62 high schools and in over 50 M-DCPS Middle and K-8 schools.

The chart below highlights a few of the M-DCPS CTE pathways. For more information go to: dcte.dadeschools.net

AGRICULTURE, FOOD & NATURAL RESOURCES*

- Agritechnology
- · Horticulture Science
- · Veterinary Assisting

ARTS, A/V TECHNOLOGY & COMMUNICATION*

- · 3D Animation
- Digital TV/Video Production
- · Fashion Technology

INFORMATION TECHNOLOGY*

- · Cloud Computing
- Cybersecurity

- Network Systems Administration (CISCO)
- Preapprenticeship Help Desk**
- Preapprenticeship -Cybersecurity**
- · Web Development

MARKETING. SALES & **SERVICE**

- Entrepreneurship
- International Marketing
- Sport, Recreation & Entertainment

ENGINEERING & TECHNOLOGY EDUCATION*

- Engineering
- · Artificial Intelligence (AI)
- · Communications Technology
- · Industrial Biotech
- · Robotics

HEALTH SCIENCE*

- Biomedical Sciences (PLTW)
- Dental Aide
- Electrocardiograph Technician (EKG)
- Emergency Medical Responder
- · Nursing Assistant
- · Pharmacy Technician
- Practical Nursing
- Vision Care Assisting



LAW, PUBLIC SAFETY & SECURITY*

- · Criminal Justice Operations
- · Introduction to Fire Fighting



HOSPITALITY/ TOURISM* & HUMAN **SERVICES**

- · Culinary Arts
- · Hospitality and Tourism
- Hotel Associate Preapprenticeship**
- Restaurant Cook Preapprenticeship**
- Cosmetology
- Dry Cleaning



- Aerospace/Aviation Technologies
- Automotive Collision & Service
- Automotive Toyota T-TEN
- Automotive Honda PACT

ARCHITECTURE & CONSTRUCTION

- · Architectural Drafting
- · Building Trades Preapprenticeship**
- Technical Design
- Welding

* For information on NAF Academies, go to: MiamiNAFAcademies.org

** FLDOE Registered Preapprenticeship leading to Apprenticeship after high school

DCTE DADESCHOOLS NET | 17

· Game Programming · Geospatial/GIS BUSINESS

- **MANAGEMENT** & FINANCE*
- · Business Management
- Finance
- · Global Trade and Logistics



· Early Childhood Education

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 Teacher Assistant Preapprenticeship**

FLORIDA 2030 WORKFORCE GOAL



The Get There Florida Workforce Education Initiative

- A Workforce education initiative aimed at raising awareness of short-term, high-value career and technical education programs.
- Partnership with the state's 28 Florida College System institutions and the state's 48 technical colleges or centers.
- Accelerates completion of an in-demand, high-value industry certification or postsecondary workforce credential.



HIGH-QUALITY CTE PROGRAMS



Provide opportunities for students to earn a recognized credential of value.



Provide instruction that integrates academic, technical, and employability knowledge and skills.



Provide instruction that incorporates relevant equipment, technology, and materials.



Provide CTE instructors who:

Maintain up-to-date knowledge and skills across all aspects of industry.

Maintain relevant evidence-based pedagogical knowledge and skills necessary to support learning.



Implement measures to eliminate barriers and create opportunities for all students to succeed in CTE.



Perkins V Quality Components of CTE Programs

Workforce
Alignment and
Business
Involvement

Engaging
Instruction and
Prepared and
Effective Staff

Sequencing,
Acceleration
and
Articulation,
Credential of
Value

Access and Equity

Work-Based Learning and CTSOs

QUALITY PROGRAM OF STUDY FRAMEWORK

- Facilities, Equipment, Technology and Materials
- Business and Community Partnerships
- Student Career Development
- Work-based Learning
- Data and Program Improvement

WORK-BASED LEARNING (WBL)

Integration of workplace experiences and CTE curriculum

- Students engage in authentic workplace tasks
- Includes activities beyond traditional cooperative education
- Effectiveness is directly related to the quality and effectiveness of the partnership
- Provides personal, educational, and career-related benefits to learners and employees



WORK-BASED LEARNING (WBL)

Examples of WBL activities that are/are not governed by Rule 6A-23.0042, F.A.C.:

Included Activities	Excluded or Ineligible Activities
□Internships	☐ Registered apprenticeships*
□Cooperative education on-the-job	☐ Preapprenticeships*
training (OJT)	☐ Job shadowing
□Clinicals	☐ Mentoring
□Practicums	☐ Informational interviews
□School-based enterprises	☐ Company tours
□Service learning	
□Capstone or industry projects	
□Virtual or simulated work-based	
learning	

REASONS TO OFFER WORK-BASED LEARNING

Benefits for Students

- Improve student perceptions of and engagement with education
- Strengthen student resume/application competitiveness
- Explore career paths firsthand and get clarity on career direction
- Establish industry relationships and connect to industry networks

Benefits for Local Educational Agencies

- Stronger employer relationships
- Better resourced and staffed CTE programs
- Improves student preparation for the workforce

Benefits for Businesses

- Stronger, more diverse talent pipeline
- Improved brand awareness and community image
- Low-cost, customizable employee training
- Stronger work culture of community service and leadership
- Tax credit for postsecondary internships through §220.198, Fla. Stat.

Access

Opportunity to fully participate in campus life.

Equity

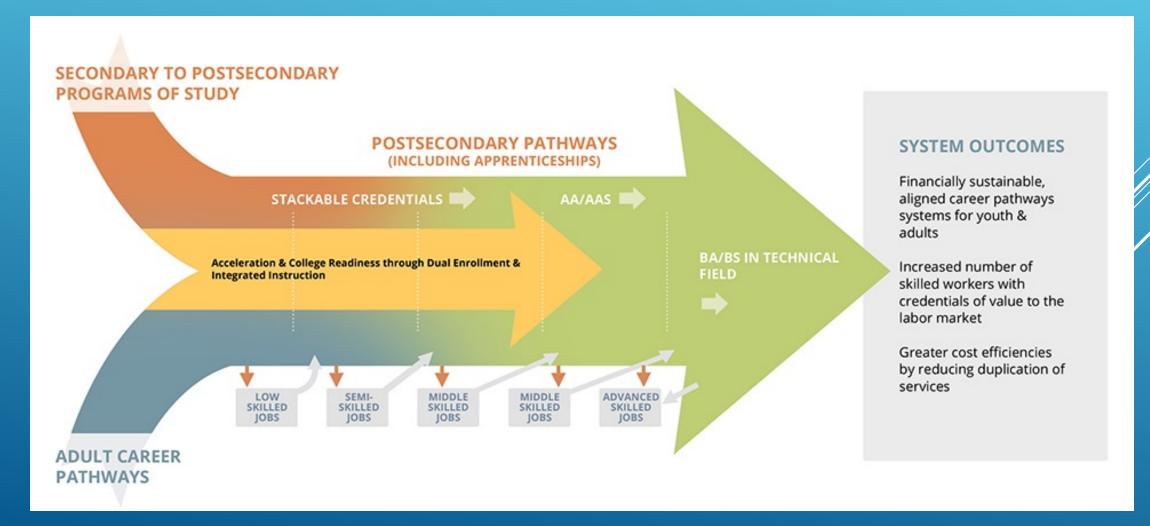
Fair and just outcomes for all to achieve their full intellectual and professional potential.

Inclusion

An individual or group sense of belonging as a valued member(s) of campus life.

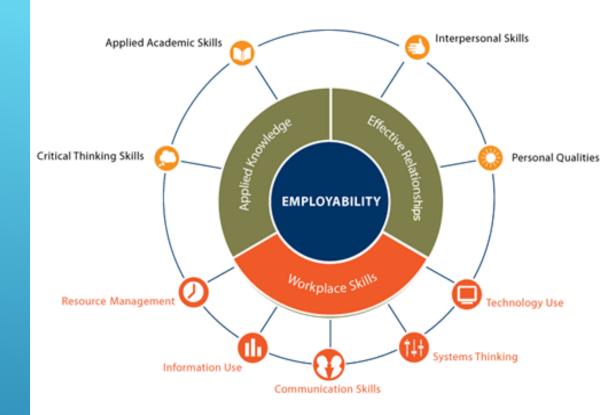
ACCESS & EQUITY

CTE supports successful transition from secondary to postsecondary education and career pathways by ensuring academic standards are meaningful for all students and aligned with postsecondary entrance requirements.



Employability Skills

- Programs that offer soft skills development equip students with the range of skills that employers are looking for.
- Strategies such as competency-based education that states can consider to ensure students are ready for postsecondary success.
- Successful careers are built on solid personal and interpersonal skills.



Developing **effective relationships** in the workplace requires a combination of interpersonal skills and personal qualities.



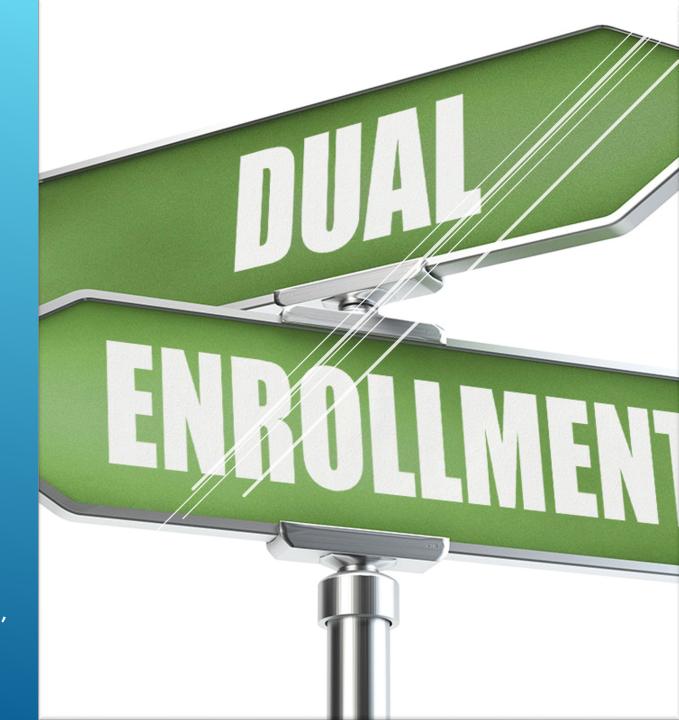
Interpersonal skills include the ability to collaborate as a member of a team or work independently, as appropriate; communicate effectively; maintain a positive attitude; and contribute to the overarching goals of the workplace.



Personal qualities that contribute to effective relationships include responsibility, self-discipline, flexibility, integrity, and initiative. Other essential qualities are a sense of professionalism and self-worth; willingness to learn; and acceptance of responsibility for one's own personal growth.

Dual Enrollment

- Allows secondary students, including home education and private school students, to take postsecondary coursework and simultaneously earn credit toward a high school diploma, a career certificate, an associate or baccalaureate degree at a Florida public or eligible private institution.
- Accelerates high school students' route to postsecondary education, workforce readiness, and in-demand careers.



Workforce Education System – Pathway to a Career FLORIDA COLLEGE SYSTEM STATE UNIVERSITY - College Credit Certificate - Industry Certification 2 + 2 SYSTEM - Career Certificate - Baccalaureate - Applied Technical Diploma - Associates PRIVATE COLLEGES & UNIVERSITIES **TECHNICAL COLLEGES/ CENTERS** - Career Certificate ADULT EDUCATION - Applied Technical Diploma - Industry Certification - Certificate - High School Equivalency - Diploma **APPRENTICESHIP High Schools** - Certificate - Career and Technical Program **Industry Certification** Middle Schools - Digital Tool Certificate - Industry Certification **Industry Advisors** FLORIDA DEPARTMENT OF EDUCATION CAREER AND ADULT EDUCATION

Preapprenticeships

- A training program designed to prepare individuals to enter and succeed in a registered apprenticeship program.
- To expand the pipeline of applicants seeking to enter these programs and better address the skills gap issue, many are turning to preapprenticeship programs at the elementary, middle, and high school levels.

PRE-APPRENTICESHIP PROGRAMS BY OCCUPATION

Teacher Assistant, 6 months

Carpenter, 1-year

Electrician, 1-year

Heating and Air Conditioning Mechanic and Installer,

1-year

Plumber, 1-year











APPRENTICESHIPS



EMPLOYER-DRIVEN model and a Great Opportunity for a Career Pathway



Apprenticeship is a work-based learning program consisting of classroom instruction and paid on-the-job training.



Apprentices are hired by employers and trained in structured work plans, leading to proficiency in an occupation.



Apprenticeship is also an employment opportunity; EARN while you LEARN

How Does an Apprenticeship Program Work?



BUSINESS INVOLVEMENT

Employees are the foundation of every Registered Apprenticeship Program.



STRUCTURED ON-THE-JOB TRAINING

Apprentices receive on-the-job training from an experienced mentor for typically not less than a year.



RELATED TECHNICAL INSTRUCTION (RTI)

Apprenticeships
combine on-the-job
learning with technical
education at community
colleges, technical
schools, apprenticeship
training schools,
provided online or at the
jobsite.



REWARDS FOR SKILL GAINS

Apprentices receive increases in wages as they gain higher level skills.



OCCUPATION AL CREDENTIAL

Registered
Apprenticeship
Programs result in a
nationally-recognized
credential – a 100%
guarantee to
employers that
apprentices are fully
qualified for the job.







Apprentice Benefits

A career pathway to various occupations

Free tuition and books

Ability to learn at your pace, with hands on instruction

Paid on-the-job training

Wage increases based on learned skills

Ongoing skill development and assessment

Nationally recognized industry credential

Structured mentoring and coaching.

APPRENTICESHIP PROGRAMS BY OCCUPATION

Aircraft Structural Assembly and Fabrication, 2 year

Automotive Service Technician, 2 year

Automotive Technician Specialist, 1 year

Building Automation Technician, 2 year

Customs Broker, 1 year

Dental Assistant, 1 year

Financial Specialist, 1 year

Help Desk Technician, 1 year

Hotel Associate, 2 year

Personal Banking Representative, 1 year

Project Manager, 1 year

Nurse Assistant Certified (Alt. Title: Nurse Assistant), 1 year

Operations/General Manager, 1 year

Transportation & Logistics Specialist, 1 year

Teacher Assistant, 18 months











CTE PROGRAM SUSTAINABILITY

CTE Programs engage students in hands-on, real-world learning to prepare them with concrete knowledge and skills to succeed in their chosen careers.

ADAPTABILITY
TO DYNAMIC
WORKFORCE
NEEDS

- Articulate Program Purpose
- Choose Relevant Courses
- Professional Development
- Build Partnerships within the Community
- Program Evaluation

THANK YOU!

For additional information, please contact:

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Pre-Apprenticeships - pre-apprenticeship@mdc.edu



