



## **A Guide to MCCTES Professional Development Services For CTE Educators**

Edition 7.0 – 11.01.11.1

### **Mission of MCCTES**

The mission of the Maryland Center for Career & Technology Education Studies is to work collaboratively with Maryland's CTE LEA leadership, and the MSDE/DCTAL to provide support for the development of high quality CTE professional, literacy and career oriented educational experiences for students and educators, and to enhance public awareness of the importance of CTE educational programming to Maryland's economic future.

### **Principle Academic Partner**

The University of Maryland Eastern Shore, as the Maryland University Systems' principle source of college and university CTE certification degree programming is MCCTES major partner for college course offerings.



### **Purpose of this guide:**

This guide is provided to CTE educators as a resource for planning an individual teacher or CTE leadership professional development program. The guide provides CTE Educators and perspective CTE Educators with information regarding college and other professional development experiences that will assist in fulfilling requirements for Maryland teacher certification and continuing education.

To start your professional development planning, MCCTES recommends reviewing information available on the Maryland State Department of Education web site, Division of Certification:

[http://www.marylandpublicschools.org/MSDE/divisions/certification/certification\\_branch/](http://www.marylandpublicschools.org/MSDE/divisions/certification/certification_branch/)

<http://www.academply.com/cert/certmd.htm>

<http://www.dsd.state.md.us/comar/SearchTitle.aspx?scope=13A>

### **Certification Guidance:**

Guidance for teacher certification and professional development program development should be obtained from the appropriate local school system CTE leadership and Human Resource/Certification authorities. MCCTES is not an authority for certification or professional development planning, and not an agent or authority for UMES or other colleges or universities.

Planning Help:

The Maryland State Department of Education provides the following direction for assistance on their web site:

**MARYLAND CERTIFICATION INFORMATION** - <http://www.academply.com/cert/certmd.htm>

*Maryland welcomes your interest regarding certification. our state is committed to insuring success for every learner in every school.*

*Talented Maryland educators are vital to the accomplishment of this goal.*

*Maryland State Department of Education*

*Division of Certification & Accreditation*

*200 West Baltimore Street*

*Baltimore, MD 21201*

*Telephone information:*

*8:00 a.m. - 5:00 p.m. Monday-Friday*

*Specialists are available:*

*8:30 a.m. - 12:30 p.m. M-W-F*

*1:00 p.m. - 4:00 p.m. T-TH*

*(410) 767-0412*

### **MSDE - Division of Career and College Readiness (DCCR)**

<http://www.marylandpublicschools.org/MSDE/divisions/careertech/?WBCMODE=Pres%2525%2525%253e%2525%2525%25%3e>

### **MCCTES Contacts & Resources for CTE Educators**

MCCTES - is your CTE program resources provider. Please call or email us if we can assist with your professional development needs!

**Call:** 410-727-4808 X147

Mr. Mike Shealey – MCCTES Director, BMI

410-727-4808 410-727-4808 ext. 147 [mshealey@thebmi.org](mailto:mshealey@thebmi.org)

Ms. Melinda Cané – Project Director, BMI

410-727-4808 410-727-4808 ext. 120 [mcane@thebmi.org](mailto:mcane@thebmi.org)

Ms. JoAnn Norris – Administrative Assistant, Graduate Studies Coordinator, UMES

410-727-4808 410-659-5332 ext. 164 [janorris@umes.edu](mailto:janorris@umes.edu)

**Get MCCTES program announcements email directly to you by registering at this address:**

<http://tp1.clearlearning.com/hshealey/MCCTESReg1.tp4>

## MSDE Certification Regulations & MCCTES Program Resources For CTE Professional Development

### Core Teacher Professional Skills Courses Designed or CTE Educators

The Maryland State Department of Education, in Maryland COMAR Title 13A, Subtitle 12 regulations as published on-line provides the direction for teacher certification:

<http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.12.02.06.htm>

<http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.12.02.02.htm>

The following programming is offered at the MCCTES Center, Baltimore Museum of Industry and periodically in other location across Maryland to fulfill the certification, re-certification and/or continuing professional development requirements for this CTE content area: (Check the MCCTES web site for current course offering information – [www.mcctes.org](http://www.mcctes.org) )

UMES / MCCTES Programming Available

EDSP 200 Introduction to Special Education for CTE Educators – 3 cr.

EDCI 409 Teaching Reading in the Content Area I – 3 cr.

EDCI 410 Teaching Reading in the Content Area II – 3 cr.

MCCTES MSDE Approved In-service

[Contact MCCTES for information]

MCCTES Workshops, Seminars & Skills Training

Praxis II Tech. Ed. Seminar – 3 Sessions

### Agribusiness Education Teacher Development

The Maryland State Department of Education, in Maryland COMAR Title 13A, Subtitle 12 regulations as published on-line provides the direction for Agribusiness and Agriscience teacher certification:

Sub-section: 13A.12.02.06 - Certification in General Secondary Academic Areas (Grades 7—12).

<http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.12.02.06.htm>

[http://www.marylandpublicschools.org/MSDE/divisions/certification/certification\\_branch/certification\\_inf/areas/docs/teacher/agricultural\\_agribusiness](http://www.marylandpublicschools.org/MSDE/divisions/certification/certification_branch/certification_inf/areas/docs/teacher/agricultural_agribusiness)

The following programming is offered at the MCCTES Center, Baltimore Museum of Industry and periodically in other location across Maryland to fulfill the certification, re-certification and/or continuing professional development requirements for this CTE content area: (Check the MCCTES web site for current course offering information – [www.mcctes.org](http://www.mcctes.org) )

UMES / MCCTES Programming Available

**[This area will be up-dated in spring 2012 – see MCCTES web site]**

AEED 423 Extension Education ( NCS 501 )

AEED 426 Development and Management of Extension Youth Program ( NCS 503 )

AEED 497 Conservation of Natural Resources ( CTE Masters Elective )

AEED 625 Administration and Supervision of Agriculture Programs ( NCS 522 )

AEED 626 Program Development in Agriculture and Extension Education ( NCS 521 )

AEED 699 Special Problems In Agricultural Education ( CTE Masters Elective )

MCCTES MSDE Approved In-service

MCCTES Workshops, Seminars & Skills Training

Praxis I Seminar for CTE Educators – 4 sessions

Instructional Safety in Tech. Ed. – 2 sessions

### Business Education Teacher Development

The Maryland State Department of Education, in Maryland COMAR Title 13A, Subtitle 12 regulations as published on-line provides the direction for Business Education, Marketing Education and Data Processing teacher certification:

Sub-section: 13A.12.02.06 - Certification in General Secondary Academic Areas (Grades 7—12).

<http://www.dsd.state.md.us/comar/13a/13a.12.02.06.htm>

Sub-section: .02 Data Processing (Business) (Grades 7—12).

<http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.12.02.08.htm>

Sub-section: .11 Marketing Education—Teacher-Coordinator (Grades 7—12).

<http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.12.02.11.htm>

The following programming is offered at the MCCTES Center, Baltimore Museum of Industry and periodically in other location across Maryland to fulfill the certification, re-certification and/or continuing professional development requirements for this CTE content area: (Check the MCCTES web site for current course offering information – [www.mcctes.org](http://www.mcctes.org) )

UMES / MCCTES Programming Available

**[This area will be up-dated in spring 2012 – see MCCTES web site]**

MCCTES MSDE Approved In-service

MCCTES Workshops, Seminars & Skills Training

## Family & Consumer Science Teacher Development

The Maryland State Department of Education, in Maryland COMAR Title 13A, Subtitle 12 regulations as published on-line provides the direction for Family and Consumer Sciences teacher certification:

Sub-section: .08 Family and Consumer Sciences (Grades 7—12).

<http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.12.02.08.htm>

The following programming is offered at the MCCTES Center, Baltimore Museum of Industry and periodically in other location across Maryland to fulfill the certification, re-certification and/or continuing professional development requirements for this CTE content area: (Check the MCCTES web site for current course offering information – [www.mcctes.org](http://www.mcctes.org) )

UMES / MCCTES Programming Available

**[This area will be up-dated in spring 2012 – see MCCTES web site]**

MCCTES MSDE Approved In-service

MCCTES Workshops, Seminars & Skills Training

## Technology Education Teacher Development

The Maryland State Department of Education, in Maryland COMAR Title 13A, Subtitle 12 regulations as published on-line provides the direction for Trade & Industry teacher certification:

Sub-section: .14 Technology Education (Grades 7—12).

<http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.12.02.14.htm>

**Note – Individuals with engineering or architectural degrees are eligible to use the content course requirements of those degree programs to fulfill the content course credit count requirement for Technology Education certification.**

The following programming is offered at the MCCTES Center, Baltimore Museum of Industry and periodically in other location across Maryland to fulfill the certification, re-certification and/or continuing professional development requirements for this CTE content area: (Check the MCCTES web site for current course offering information – [www.mcctes.org](http://www.mcctes.org) )

UMES / MCCTES Programming Available

- (i) Nature, impact, and evolution of technology;
  - EDTE 415 Technology Impacts & Issues - 3 cr.
  - EDTE 487 Foundations of Technology - 3 cr.
- (ii) Core technologies (mechanical, structural, fluid, electrical, electronic, optical, thermal, biotechnology, and materials);
  - EDTE 482 Core Technologies & Design I - 3 cr.
  - EDTE 483 Core Technologies & Design II - 3 cr.
- (iii) Information systems;
  - EDTE 484 Information Systems - 3 cr.
  - EDTE 488 G Engineering Design & Development: CADD & CAM - 3 cr.
- (iv) Enterprises using technology; and
  - EDTE 445 American Industry & Global Competition - 3 cr.
- (v) Instructional planning and development; and
  - EDTE 437 Student Performance Assessment - 3 cr.
  - EDTE 440 Integrating Mathematics and Science in Occup. Ed. - 3 cr.
  - EDTE 450 Mentoring: Expectations and Responsibilities - 3 cr.
  - EDTE 467 Instructional Analysis and Curriculum Development - 3 cr.
  - EDTE 480 Coordination of Work Based Learning Programs - 3 cr.
  - EDTE 481 Facility Organization & Management - 3 cr.
  - EDTE 485 Safety Programs in Education & Occupational Settings - 3 cr.
  - EDTE 486 Instructional Media Development - 3 cr.
  - EDTE 488E Work-Based Learning Externship - 3 cr.

MCCTES MSDE Approved In-service

New & Emerging Technologies I, II, III & IV – 1 cr. ea.  
Foundations of Technology, MD VSC – 3 cr.

Digital Data Acquisition: STEM Integration – 3 cr.

Advance Design Applications [ADA] – 2 cr.  
Advanced Technology Applications [ATA] – 2 cr.

MCCTES Workshops, Seminars & Skills Training

Praxis II Tech. Ed. Seminar – 3 Sessions  
Instructional Safety in Tech. Ed. – 3 sessions

## Trade & Industry Education Teacher Certification

The Maryland State Department of Education, in Maryland COMAR Title 13A, Subtitle 12 regulations as published on-line provides the direction for Trade & Industry teacher certification:

Sub-section: 15 Trades and Industry (Grades 7—12).

<http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.12.02.15.htm>

The following programming is offered at the MCCTES Center, Baltimore Museum of Industry and periodically in other location across Maryland to fulfill the certification, re-certification and/or continuing professional development requirements for this CTE content area: (Check the MCCTES web site for current course offering information – [www.mcctes.org](http://www.mcctes.org) )

### UMES / MCCTES Programming Available - SPC

EDTE 368 Curr. Development & Methods I – 3 cr.  
EDTE 370 Curr. Development & Methods II – 3 cr.  
EDTE 437 Student Performance Assess.– 3 cr.  
EDSP 200 Intro. to Special Education – 3 cr.  
EDCI 409 Teach. Reading in the Content Area I – 3 cr.  
EDTE 440 Integrating Mathematics and Science in Occupation Ed. – 3 cr.

### UMES / MCCTES Programming Available - APC

EDCI 410 Teaching Reading in the Content Areas II – 3 credits  
EDTE 499 Research & Experimentation in Tech. Ed. – 3 credits  
EDTE 445 American Industry & Global Competition – 3 credits  
EDTE 450 Mentoring: Expectations and Responsibilities – 3 credits  
EDTE 467 Inst. Analysis and Curriculum Develop. – 3 credits  
EDTE 481 Facility Organization & Management – 3 credits  
EDTE 484 Information Systems – 3 credits  
EDTE 486 Instructional Media Development – 3 credits  
EDTE 480 Coordination of Work Based Learning Programs – 3 credit  
EDTE 485 Safety Programs in Education & Occupation Settings

[MCCTES Workshops, Seminars & Skills Training](#)

## Work Based Learning Coordinator Certification

The Maryland State Department of Education, in Maryland COMAR Title 13A, Subtitle 12 regulations as published on-line provides the direction for Trade & Industry teacher certification:

Sub-section: 16 Work-Based Learning Coordinator (Grades 7—12).

<http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.12.02.16.htm>

The following programming is offered at the MCCTES Center, Baltimore Museum of Industry and periodically in other locations across Maryland to fulfill the certification, re-certification and/or continuing professional development requirements for this CTE content area: (Check the MCCTES web site for current course offering information – [www.mcctes.org](http://www.mcctes.org) )

### UMES / MCCTES Programming Available

[EDTE 480 Coordination of Work-Based Learning – 3 credits](#)  
[EDTE 467 Instructional Analysis and Curriculum Development – 3 credits](#)  
[EDTE 445 American Industry and Global Competition – 3 credits](#)

13A.12.02.16 - .16 Work-Based Learning Coordinator (Grades 7—12).

A. An applicant may not seek initial certification as a work-based learning coordinator (grades 7—12).

B. To add an endorsement in work-based learning coordinator (grades 7—12), the applicant shall:

(1) Hold a professional certificate with certification under COMAR 13A.12.02.06—11, .13—15, and .17—20(A)(3) of this chapter;

(2) Complete 6 semester hours of content course work taken at an IHE or through CPDs with a minimum of 3 semester hours in each of the following content areas:

(a) Organizing, coordinating, and marketing of work-based learning programs [[EDTE 480 Coordination of Work-Based Learning](#)] ; and

(b) Instructional management and curriculum development for work-based learning programs [[EDTE 467 Instructional Analysis and Curriculum Development](#)] ; and

(3) Complete a work experience requirement through any of the following:

(a) Documented evidence of employment equivalent to a minimum of 1,000 hours of successful, wage-earning, nonteaching occupational experience;

(b) Documented evidence of employment equivalent to a minimum of 500 hours of successful, wage-earning, nonteaching occupational experience plus 500 hours of self-employment;

(c) Participating in a supervised and approved teacher externship experience, which shall, at a minimum:

(i) Be 150 hours;

(ii) Include all aspects of the industry;

(iii) Be in accordance with the local school system guidelines for work-based learning coordinator externships; and

(iv) Occur at a work site approved by the local school system; or

(d) Complete 3 semester hours of content course work in contemporary workplace practices taken at an IHE or through CPDs that includes [[EDTE 445 American Industry and Global Competition](#)] :

(i) Site visits to business and industry settings; and

(ii) Exposure to all aspects of the industry.

C. All work experience under §A(3)(a) of this regulation shall have occurred within the last 10 years. Verification of occupational experience shall be submitted in the form of a notarized letter by former employers, listing specific job titles, duties performed, dates of employment, and hours worked.

D. All work experience under §A(3)(b) of this regulation shall have occurred within the last 10 years. Verification of occupational experience shall be submitted by former employers in the form of a notarized letter, listing specific job titles, duties performed, dates of employment, and hours worked. Verification of self-employment shall be verified by license or by submitting tax forms.



## Masters of Education in Career & Technology Education – 30 Credits

For: Agricultural Ed., Bus. Ed., FACS, Work-Based Learning, Tech. Ed., Engineering & T&I Educators

Master of Education Program Description - <http://www.umes.edu/tech/trail/tech%20dept/tedms/tedms.htm>

The Department of Technology offers a Master of Education Degree program (M.Ed.) in Career and Technology Education (CTED). The program will refine the student's knowledge and skills to become master classroom teachers, resource teachers, teacher consultants, specialists, and administrators in Career and Technology Education. The program is also designed to prepare teachers and educational leaders to qualify for Advanced Professional Certification (APC) in Maryland.

### Master of Education Admission Requirements

Students who enter the M.Ed. program must possess an earned baccalaureate degree in Technology Education or a related content area such as industrial arts or occupational technical education. Matriculating students must meet all requirements for regular admission to the graduate program. In some cases, provisional admission will be granted. Applicants must fulfill the following for regular admission:

- Complete the graduate school application for a degree program including a statement of purpose.
- Possess an undergraduate cumulative grade point average (GPA) of at least 3.0, or possess a prior graduate degree.
- Submit official transcripts from all higher education institutions attended.
- Submit three letters of evaluation/recommendation that address:
  - Personal qualities, e.g. character and academic abilities, problem solving, conceptual thinking, and the writing and speaking skills needed to support a rigorous graduate program.
  - Personal determination and commitment needed to complete the program.
- Students must achieve passing scores which meet established Maryland State standards on the core battery of the PRAXIS teacher examinations. Transcripts and academic credentials of all applicants will be reviewed by the graduate admissions committee. Individuals who lack appropriate coursework will be expected to complete the identified course content requirements prior to their enrollment in the capstone research portion of the program.

### Basic Course Work:

<b>Course #</b>	<b>Core Required Courses</b>	<b>Credits</b>
CTED 600	Career & Technology Education Content Methods and Strategies	(3)
CTED 602	Career & Technology Education Instructional Management and Organization	(3)
EDUC 615	Administration and Leadership	(3)
EDUC 610	Learning and Instructional Design	(3)
CTED 640	Research in Career and Technology Education I	(3)
CTED 650	Research in Career and Technology Education II	(3)

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### Electives – in your area of interest ..... see below ▼

**TOTAL: 30**

#### **Technology and Engineering Education:**

EDTE 482	Core Technologies & Design I [Non-Maryland Educated Graduates]	(3)
EDTE 483	Core Technologies & Design II [Non-Maryland Educated Graduates]	(3)
EDTE 437	Student Performance Assessment	(3)
CTED 630	Special Problems in Career and Technology Education	(3)
	<b>Elective Total</b>	<b>12</b>

#### **Engineering Education:**

EDTE 481	Facility Organization & Management	(3)
EDTE 482	Core Technologies & Design I	(3)
EDTE 483	Core Technologies & Design II	(3)
EDTE 485	Safety Programs in Education & Occupation Settings	(3)
EDTE 487	Foundations of Technology	(3)
CTED 630	Special Problems in Career and Technology Education	(3)
	<b>Elective Total Needed</b>	<b>12</b>

#### **Work-Based Learning:**

EDTE 480	Coordination of Work-Based Learning	(3)
EDTE 467	Instructional Analysis & Curriculum Development	(3)
EDTE 445	American Industry and Global Competition	(3)
CTED 630	Special Problems in Career and Technology Education	(3)
	<b>Elective Total</b>	<b>12</b>

Other CTE M.Ed. focused program areas:

*[Consult the UMES Graduate Coordinator]*

- Family & Consumer Science
- Business Education
- Agricultural Education



## MCCTES - your CTE program resources provider

Please call or email us if we can assist with your professional development needs!

Call: 410-727-4808 X147

Email: [mshealey@thebmi.org](mailto:mshealey@thebmi.org) / [mcane@thebmi.org](mailto:mcane@thebmi.org)

### GET MCCTES PROGRAM ANNOUNCEMENTS EMAILED TO YOU:

<http://tp1.clearlearning.com/hshealey/MCCTESReg1.tp4>

### Important resource and information web sites:

- **MCCTES Web Site** – [www.mcctes@thebmi](http://www.mcctes@thebmi)
- **COMAR** [Code of Maryland Regulations] – <http://www.dsd.state.md.us/comar/>
- **MSDE** - <http://www.marylandpublicschools.org/msde>
- **DCTAL** - <http://www.marylandpublicschools.org/MSDE/divisions/careertech/>
- **UMES** - <http://www.umes.edu/>
- **UMES Department of Technology** - <http://www.umes.edu/tech/>
- **Baltimore Museum of Industry** – [www.thebmi.org](http://www.thebmi.org)
- **TEEAM** [Technology Education & Engineering Association of Maryland] - <http://www.techedmd.org/>
- **Skills USA** - <http://www.mdskillsusa.org/mdskillsusa/index.htm>
- **ITEA** – International Technology Education Association - <http://www.iteaconnect.org/>

### Important Maryland Vendors & Suppliers

- **Kelvin, Ltd.** – <http://www.kelvin.com>
- **PITSCO** - <http://www.pitsco.com>
- **Paxton Patterson** - [http://www.paxtonpatterson.com/pp\\_index.php](http://www.paxtonpatterson.com/pp_index.php)
- **Amtek** - <http://www.amtekcompany.com/>
- **Diversified Educational Systems** - <http://www.des.com/>
- **Ronald A. Williams, Ltd.** - <http://www.rawledu.com/>
- **Goodheart Willcox Publishers** - <http://www.g-w.com/ordering/>
- ▶ **Check the TEAM web site for additional information.** - <http://www.techedmd.org/>

## MCCTES – The Maryland Center for Career and Technology Education Studies

MCCTES Mission - Maryland Center for Career and Technology Education Studies is to provide leadership and support to local education agencies, educators and community organizations in the development of competent and appropriately educated and certified Career and Technology Education teachers and administrators. The Maryland Center serves to facilitate cooperation among and between local education agencies, the Maryland State Department of Education, the University of Maryland System, community organizations and businesses. The Center develops, organizes and conducts activities meeting teacher education needs, and promotes the growth of Career and Technology Education in Maryland.

### MCCTES Contacts

Office Hours: **Tuesday / Wednesday / Thursday - 9:30am - 7:30pm**

Address: Maryland Center for CTE Studies @ Baltimore Museum of Industry, 1415 Key Highway, Baltimore, MD 21230

Phone: 410-727-4808 X 147 or 120

Information Line: 410-685-1648

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