



# MDE and OCTE Website & Resources

Office of Career and Technical Education  
Michigan Department of Education

*Candace Vinson, Education Consultant Career Readiness Unit*





# CTE Program Overview

## *Four Components of a CTE Program*

Office of Career and Technical Education  
Michigan Department of Education



*Lee Greenacre, Education Consultant Career Readiness Unit*



# Four Components of a CTE Program


- Classroom Instruction
- Laboratory Learning
- Work-Based Learning
- Student Leadership






### Four Components of a CTE Program


Students enrolled in state-approved secondary career and technical education (CTE) programs have an opportunity to acquire skills that prepare them for successful career entry, advancement, and/or continuing education. Each secondary state-approved program is required to integrate four key components:




**Classroom Instruction:** Integration of academic and technical skills to support core knowledge needs. Focused instruction, reinforcement, and additional depth on academic concepts that support technical skills.




**Laboratory Learning:** Hands-on learning to develop technical skills. Simulation labs, project-based learning and student skill demonstration.



**Work-Based Learning:** Work-based learning opportunities to further develop and apply skills. Sustained interactions with employers in real workplace settings that foster first-hand engagement with tasks required of specific careers.



**Student Leadership:** Student leadership opportunities to support employability and Career Ready Practices. Intra-curricular activities that prepare students to become effective leaders; for example, participation in Career and Technical Student Organization's (CTSOs).





# Classroom Instruction

- Academic Skills
  - Math
  - English
  - Science
- Technical Skills
  - Program Specific
- Career Ready Practices
  - Employability Skills





# Choosing Curriculum for Programs

- Identify most important curriculum elements
- Consider multiple resources
- Review samples
- Review with advisory committee
- Consider a trial run





# Laboratory Learning

- Hands-on
- Technical Skill Development
- Simulation Labs
- Project Based Learning
- Skill Demonstration





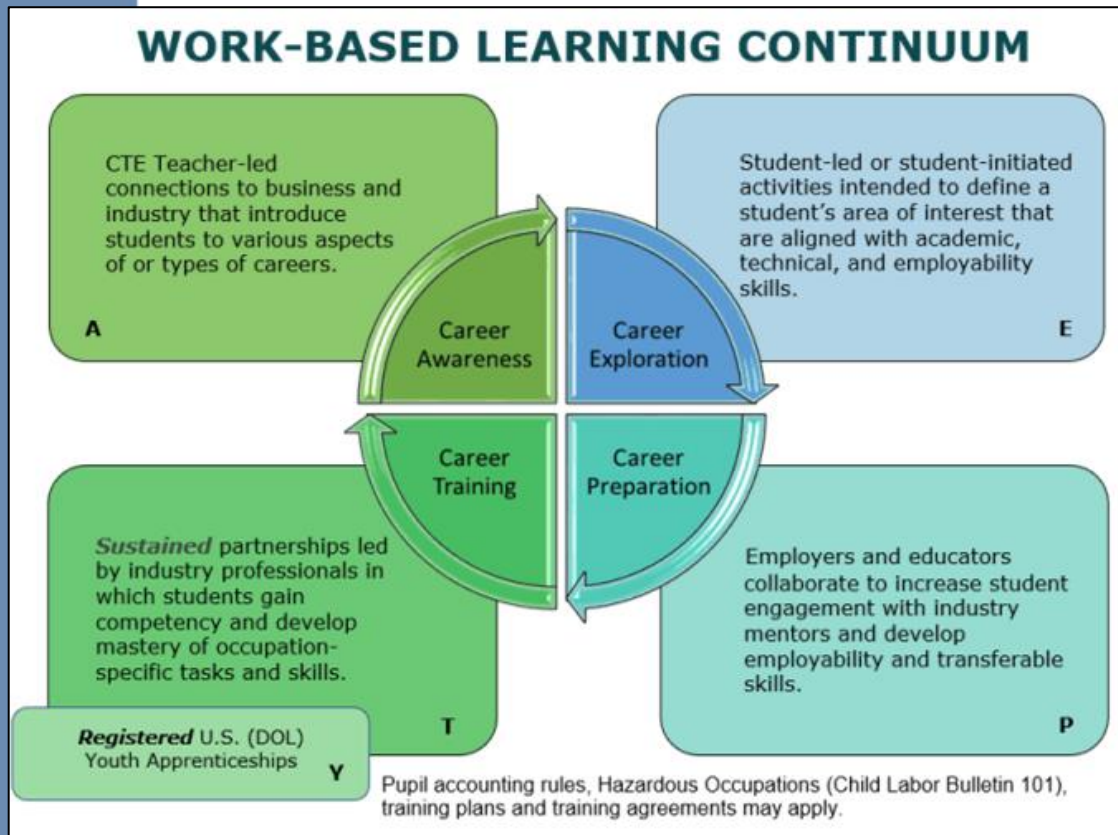
# Replicating Business & Industry



- Classrooms and labs
- Behaviors and processes
- Advisory Committee input
- Business tours and job shadows



# Work-Based Learning



- Increases in intensity
- Includes sustained interactions with employers
- Incorporates real workplace settings
- Engages with business and industry
- Aligns to program standards



# WBL Resources



**WBL MANUAL**



**WBL TOOLKIT**



**MCPA**



# Student Leadership



- Leadership Opportunities
- Career Ready Practices
- Employability Skills
- Career & Technical Student Organizations (CTSO)



# Nested Leadership Model

Moving from “Me to We”





# What questions do you have?





# CIP Self-Review Overview

Office of Career and Technical Education  
Michigan Department of Education

*Tom Knight, Education Consultant Career Readiness Unit*  
*Candace Vinson, Education Consultant Career Readiness Unit*





# MDE-CTE Portal Access

Starting **October 1, 2022** access to the CTE Portal will require a MILogin.

Create a [MILogin for Third Party](#) account and link to your MEIS account.

***Do not GOOGLE to get to the MILogin page! Use the link provided.***



**MEMO #2022-026:** Grants Electronic Monitoring Systems (GEMS) Transition from Michigan Education Information System (MEIS) to MILogin

# CIP Self-Review: MDE-CTE Portal

Office of Career and Technical Education Quick Links: [About Us](#) [Educators](#) [Data and Reports](#) [Memos](#) [Partners](#) [Students](#) [Home](#)

CTE Educator Quick Links: [CTE Administrators](#) [CTE Teachers](#) [CTE Events](#) [CTE Instructional Resources](#) [Early Middle](#)

[Career Development Resources](#) [Funding and Monitoring](#)

### Frequently Used Resources for Teachers

		
<a href="#">Four Components of a CTE Program</a>	<a href="#">CTE Instructional Resources</a>	<a href="#">CTE Facts Brochure and Glance Resource</a>
		
<a href="#">Classification of Instructional Program (CIP) Self Review</a>	<a href="#">New CTE Program Application Tool Kit</a>	<a href="#">Teacher Certification</a>

- MDE-CTE Portal
- CIP Program Endorsements for CTE Instruction
- Instructions for Adding a User for the CIP Self-Review
- CIP Self-Review Administrator Review Guide
- CIP Self-Review Form
- C02 - PD Log Template
- C03 - Program Advisory Committee Meeting Agenda and Minutes Template
- C03 - Program Advisory Committee Roster Template
- C04 - Instructional Design Template
- C04 - Safety Training
- C05 - Work Based Learning Template
- C06 - Student Leadership Template
- C07 - Assurance doc to only replace room photos
- C08 - Credentials Template



# CIP Self-Review-CTE Portal



## CTE Portal CIP Self-Review

Michigan Department of Education

MEIS Username:

MEIS Password:

Login

*To enter information, you will need a Michigan Education Information System (MEIS) account. If you do not have a MEIS account, you can create one at the [Create a New MEIS Account](#) page.*

*If you do not know your MEIS login or password, you can receive this information on the [MEIS credential recovery](#) page.*

[Create a new MEIS account](#)

[I forgot my MEIS login name](#)

[I forgot my MEIS password](#)

[MI.gov](#)

[Home](#)

[Policies](#)

Copyright 2017 State of Michigan

# CIP Self-Review Form

## Classification of Instructional Programs Self-Review for Michigan Secondary Career and Technical Education State Approved Programs

The Classification of Instructional Programs (CIP) Self-Review is a tool developed to assist with Technical Review Assistance and Compliance (TRAC) monitoring of Career and Technical Education (CTE) programs and to help programs determine focus areas for continuous program improvement.

MDE utilized the library of resources from the [High Quality CTE Program of Study](https://www.acteonline.org/professional-development/high-quality-cte-tools/) to support many areas in the Self-Review, located at <https://www.acteonline.org/professional-development/high-quality-cte-tools/>.

### Administrator Responsibilities

Each Career Education Planning District (CEPD) administrator is required to review 20% of their CTE program year and each program must be reviewed at least once every five years. This process must be completed via [MDE-CTE Portal](https://www.michigan.gov/mde-cteportal) [www.michigan.gov/mde-cteportal](https://www.michigan.gov/mde-cteportal) by **June 30<sup>th</sup>** of each year. The sequence of the selected programs is at the discretion of the CEPD Administrator. There is no need to upload a list of the CEPD-selected 20%. This information is recorded and reported within the MDE-CTE Portal.

**Note:** The Michigan Department of Education annually selects CTE programs to review during the TRAC cycle specific set of criteria. The selected programs may or may not be in the same 20% that the CEPD Administrator selected to review that year.

### Teacher Responsibilities

Each CTE program teacher is responsible to update their MDE-CTE Portal profile page and annual industry-related professional development. It is the lead CTE program teacher's annual responsibility to keep all CTE Program Number (PSN) evidences up to date in the [CIP Self-Review](#) at [www.michigan.gov/mde-cteportal](https://www.michigan.gov/mde-cteportal). Contact the appropriate [MDE program consultant](#) if you have any questions: [https://www.michigan.gov/documents/mde/18\\_Career\\_Cluster\\_and\\_CIP\\_Codes\\_by\\_Consultant\\_578234\\_7.pdf](https://www.michigan.gov/documents/mde/18_Career_Cluster_and_CIP_Codes_by_Consultant_578234_7.pdf).

**Note:** Prior to uploading, documents should be converted to PDF.

Revised August 2020

Page

## Classification of Instructional Programs Self-Review for Michigan Secondary Career and Technical Education State Approved Programs

### C01 – Program Teacher Certification

Each teacher in the program must identify the type of appropriate CIP CTE certification. Upload PDF copies of actual credentials only in circumstances when credentials are not listed in MOECS records. Teachers may obtain their [Michigan Online Educator Certification System](https://mdoe.state.mi.us/MOECS/PublicCredentialSearch.aspx) (MOECS) record at: <https://mdoe.state.mi.us/MOECS/PublicCredentialSearch.aspx>

C01	Criteria	Evidence
<input type="checkbox"/>	Certified teacher	Update name in MDE-CTE Portal profile to <u>exactly</u> match name on credentials. Teacher is appropriately certificated for CIP code. Note: Actual credential of MOECS printout may be requested on site if a match cannot be made electronically.
<input type="checkbox"/>	District holds Annual Career Authorization (ACA)	Name in MDE-CTE Portal profile <u>exactly</u> matches name on credentials and ACA is current. Note: Actual credential of MOECS printout may be requested on site if a match cannot be made electronically.
<input type="checkbox"/>	Postsecondary instructor	Postsecondary instructor teaching in a high school building must have an ACA. If teaching on the postsecondary campus, no ACA is required (identify college).
<input type="checkbox"/>	Licensure (if applicable)	Copy of current professional state licensure (PDF)
<input type="checkbox"/>	Industry Certification(s) (if applicable)	Copy of current industry certification (PDF)

Michigan Teacher Certification Administrative Code: R390.1105, Rule 5(2) PART 6. CTE ENDORSEMENTS, CTE CERTIFICATES, AND ANNUAL AUTHORIZATION  
Michigan CTE Reimbursed Programs Administrative Code: R395.241, Rule 11(1)(c) R395.244, Rule 14(1)(b) R395.244, Rule 14(8)(a)

Revised August 2020

Page 2 of 9



# What questions do you have?





# Introduction to CTE Tool Kits

Office of Career and Technical Education  
Michigan Department of Education

*Mark Forbush, Education Consultant Career Readiness Unit*  
*Dorthy Switalski, Education Consultant Career Readiness Unit*











# Where to find the tool kit

- MDE-OCTE Website
- Instructional Resources
- CTE Tool Kits and Manuals

Office of Career and Technical Education Quick Links: [About Us](#) [Educators](#) [Data and Reports](#) [Memos](#) [Partners](#) [Students](#) [Home](#)

CTE Educator Quick Links: [CTE Administrators](#) [CTE Teachers](#) [CTE Events](#) [CTE Instructional Resources](#) [Early Middle College](#)  
[Career Development Resources](#) [Funding and Monitoring](#)

**CTE Instructional Resources**

 <p>Four Components of a CTE Program</p>	 <p>Instructional Resources, by Career Cluster</p>	 <p>CTE Tool Kits and Manuals</p>	 <p>Acronyms and Abbreviations</p>
 <p>Student Leadership</p>	 <p>Work-Based Learning</p>	 <p>Teacher Certification</p>	 <p>Special Populations</p>



## Career and Technical Education Teacher Tool Kit

2022-2023 Edition



Michigan Department of Education  
Office of Career and Technical Education

**Mission:** To prepare students so they have the necessary academic, technical, and work behavior skills to enter, compete, and advance in education and their careers.



# CTE Teacher Tool Kit

## CTE Tool Kits and Manuals



CTE Teacher Tool Kit



CTE Program Advisory Tool Kit



New CTE Program Application  
Tool Kit



61b CTE EMC and CTE Dual  
Enrollment Tool Kit



CTE Administrator Manual



Work-Based Learning Tool Kit

(Managing Your Risk)



## Program Advisory Committee Tool Kit

2022-2023 Edition

Michigan Department of Education  
Office of Career and Technical Education

**Mission:** To prepare students so they have the necessary academic, technical, and work behavior skills to enter, compete, and advance in education and their careers.



# Program Advisory Tool Kit

## CTE Tool Kits and Manuals



CTE Teacher Tool Kit



CTE Program Advisory Tool Kit



New CTE Program Application  
Tool Kit



61b CTE EMC and CTE Dual  
Enrollment Tool Kit



CTE Administrator Manual



Work-Based Learning Tool Kit  
(Managing Your Risk)



Work-Based Learning Manual

# Table of Contents

Embedded links for  
easy navigation

## TABLE OF CONTENTS

<b>Overview .....</b>	<b>1</b>
<b>Teacher Tool Kit Objectives .....</b>	<b>1</b>
<b>CTE Certification Support Materials .....</b>	<b>2</b>
Professional Development of CTE Certified Teachers .....	2
Professional Development of Annually Career Authorized Teachers.....	3
<b>Professional Development Growth Plan for CTE Teachers .....</b>	<b>4</b>
<b>Networking Guide .....</b>	<b>6</b>
<b>Mentorship .....</b>	<b>7</b>
Core Components of a CTE program .....	8
<b>Classroom Instruction and Laboratory Learning .....</b>	<b>8</b>
<b>Syllabus .....</b>	<b>9</b>
<b>Safety.....</b>	<b>9</b>
<b>Student Leadership and Career and Technical Student Organization.....</b>	<b>10</b>
Important Concepts for Building Student Leadership.....	10
Reporting Leadership in the CIP Self-Review .....	14
<b>Work-based Learning (WBL) .....</b>	<b>15</b>
The WBL Continuum.....	16
<b>Program Advisory Committees .....</b>	<b>18</b>
<b>Appendices.....</b>	<b>19</b>
Appendix A - CTE Teacher Suggested Calendar of Activities .....	20
Appendix B - Safety Check List.....	24
Appendix C - Example Syllabus for CTE .....	26

# Work-Based Learning

## Work-Based Learning (WBL)

Work-Based Learning is sustained and progressively intensive interactions with employers or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first-hand engagement with the tasks required of a given career field, that are aligned to curriculum, instruction, and Career and Technical Education (CTE) Program standards.



## WBL Employer Resources

- [WBL Myth vs. Fact At-A-Glance](#)
- [Getting Started Checklist](#)

## WBL Coordinator Manual

The [Work-Based Learning Toolkit \(Managing Your Risk\)](#) has been developed to assist school district staff with consistent directions and procedures for designing and implementing appropriate solutions when students are placed in work site situations. WBL sample forms can be found here too, such as:

- Sample In-District CTE & Transition Placement Agreement
- Sample CTE Training Agreement
- Sample Training Plan

Also, view [Work-Based Learning Frequently Asked Questions \(FAQs\)](#).



## WBL CTE Teacher Resources

- [Michigan Department of Education Work-Based Learning Manual](#)
- [CTE WBL Continuum Guide](#)
- [CTE Virtual WBL Continuum Guide](#)
- [Choose Your Own WBL Adventure](#)
- [WBL Examples](#)



## CTE Tool Kits and Manuals



CTE Teacher Tool Kit



CTE Program Advisory Tool Kit



New CTE Program Application Tool Kit



61b CTE EMC and CTE Dual Enrollment Tool Kit



CTE Administrator Manual



Work-Based Learning Tool Kit

(Managing Your Risk)



Work-Based Learning Manual





# What questions do you have?





# Perkins V Credentials Overview

Office of Career and Technical Education  
Michigan Department of Education  
*Deb Miller, Supervisor Career Readiness Unit*






# State-Approved Credentials are . . .



- A Perkins V Core Performance Indicator, Program Quality (5S1)
- Postsecondary Industry Recognized
- A measure for technical skills
- Used to gain employment or advancement within occupation

To adhere to the federal mandate for CTE, ***Strengthening Career and Technical Education for the 21st Century Act*** (Perkins V), Michigan chose the program quality measure—5S1 Core Performance Indicator of students obtaining a recognized postsecondary credential endorsed by employers.

# Types of State-Approved Credentials



**New Credential Selection Process (for Schools)**

The process for adding a new credential is carried out through the [Career Pathway Grants](#) (CPGs). Eligible Carl D. Perkins subrecipients (secondary or postsecondary institutions) work with employers to identify the credentials utilized to hire or promote for high-skill, high-wage, in-demand occupations and then align those credentials to state CTE program standards/competencies to ensure aligned, high quality CTE programs of study.

Once the [Credential Selection Process](#) has been completed, grant recipients submit recommendations to the Michigan Department of Education, Office of Career and Technical Education (MDE-OCTE). If the credential(s) are approved, a variety of instructional resources, including technical assistance will be provided for CTE teachers and administrators. View a list of [currently approved credentials](#).


Credentials approved for Perkins V reporting must meet specific criteria. The [Learning that Works Resource Center](#) offers many national resources on industry-recognized credentials, such as:

- [Credentials of Value](#)
- [Measuring Program Quality Credentials](#)

The CPG supports the Michigan [Perkins V](#) state plan for career and technical education and [Michigan's Top 10 Strategic Education Plan](#) to increase the percentage of adults with a postsecondary credential. CPG also supports Michigan's [Sixty by 30](#) goal to increase the number of working-age adults with a skill certificate or college degree from 49% to 60% by 2030.

Please direct questions to [MDE-CareerPathways@michigan.gov](mailto:MDE-CareerPathways@michigan.gov).

*As a locally controlled state, the Michigan Department of Education (MDE) does not purchase or recommend specific credentials, curriculum, or instructional resources for local school districts.*



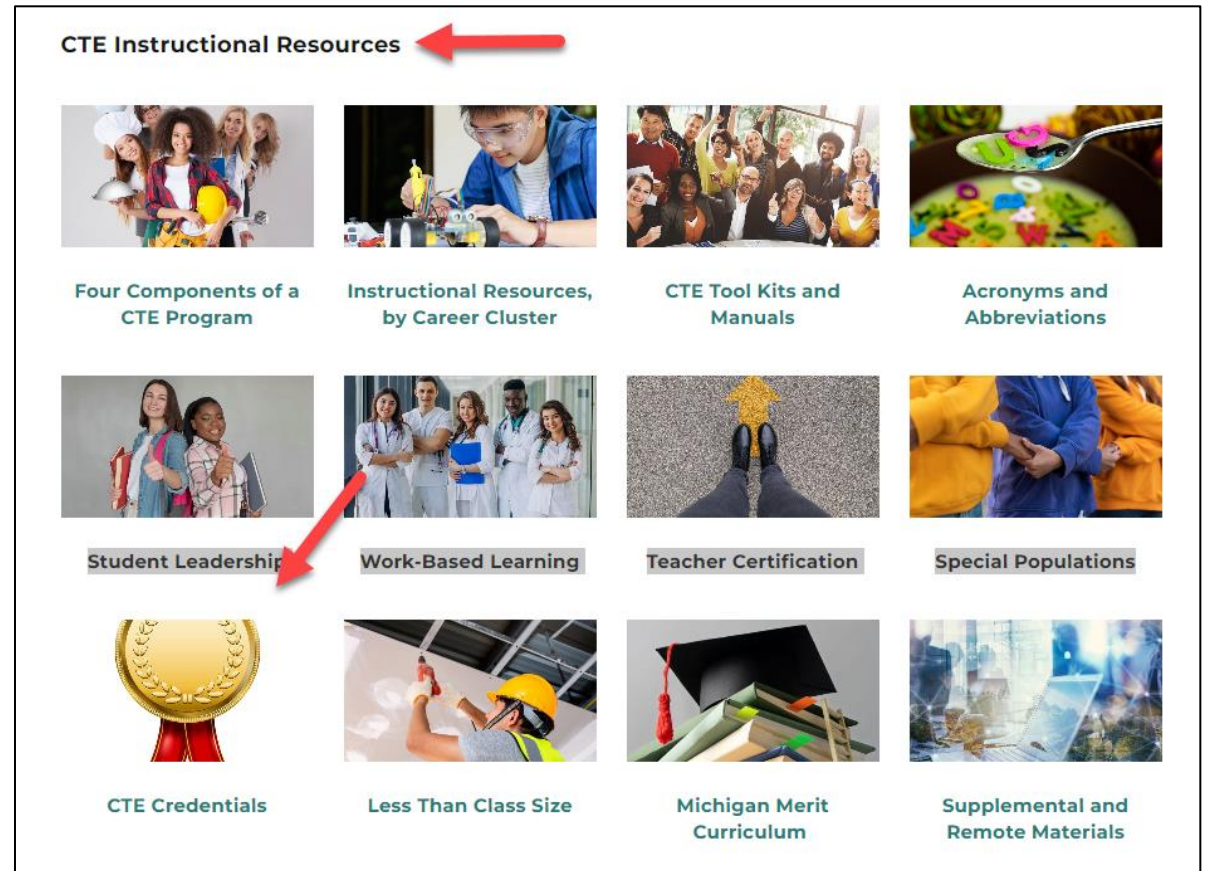
- Industry-Recognized Certificates
- Education Certificates
- Licenses
- Educational Degrees
- Certificates of Completion of an Apprenticeship



# Where to Find State-Approved Credentials

Go to...

- MDE-OCTE Website
- Instructional Resources
- CTE Credentials





# Credential Reporting

- Refer to CTE Credentials list found on the MDE/OCTE website on the CTE Instructional Resources page.
- Report ALL credentials earned in CTEIS
  - State-approved credentials
  - Supplemental credentials
- Any ONE state-approved credential required to count in the 5S1 numerator for CPI data.





# Programs reporting by Perkins IV segments with state- approved credentials for 5S1

11.0901	Computer Syst Networking & Telecommunications
15.1301	Drafting/Design Technology
26.0102	Biotechnology Medical Sciences
43.0101	Public Safety/Protect Services
46.0303	Lineworker
47.0603	Collision Repair Technician (ASE Certified)
47.0613	Medium/Heavy Truck Technician (ASE Certified)
48.0508	Welding, Brazing/Soldering
51.0707	Health Informatics
51.1000	Diagnostic Services



# Programs reporting state-approved credentials for 5S1 in 2021-2022

12.0400	Cosmetology
13.0000	Education General
46.0000	Construction Trades
46.0301	Elec/Power Trans Installer
47.0604	Automobile Technician (ASE Certified)
51.0000	Therapeutic Services
52.0299	Business Admin Mgt & Operations



# Programs reporting state-approved credentials for 5S1 in 2022-2023

49.0101	Aero/Av/Aerospace Sci & Tech
49.0102	Airline/Commercial/Professional Pilot and Flight Crew
52.0901	Hospitality Administration/Management, General



# Programs reporting state-approved credentials for 5S1 in 2023-2024

11.0201	Computer Programming/Programmer
11.1003	Computer and Information Systems Security/Information Assurance
14.4201	Mechatronics
43.0100	Public Safety/Protect Services
48.0508	Welding, Brazing/Soldering
52.0800	Finance & Financial Management Services
52.1999	Marketing Sales and Services



# Programs reporting state-approved credentials for 5S1 in 2024-2025

01.0000	Agriculture, Agricultural Operations and Related Sciences
01.0601	Applied Horticulture & Horticultural Operations
01.0903	Animal Health and Veterinary Science
03.0000	Natural Resources and Conservation
11.0901	Computer Syst Networking & Telecommunications
11.1001	Systems Administration/Administrator
12.0500	Cooking & Related Culinary Arts, General
48.0501	Machine Tool Technology/Machinist
48.0701	Woodworking General



# What questions do you have?





# Career Pathways Grant Curriculum Framework

Office of Career and Technical Education  
Michigan Department of Education

*Celena Mills, Education Consultant Career Readiness Unit*

*Dorthy Switalski, Education Consultant Career Readiness Unit*





# CPG Changes

## **Perkins IV**

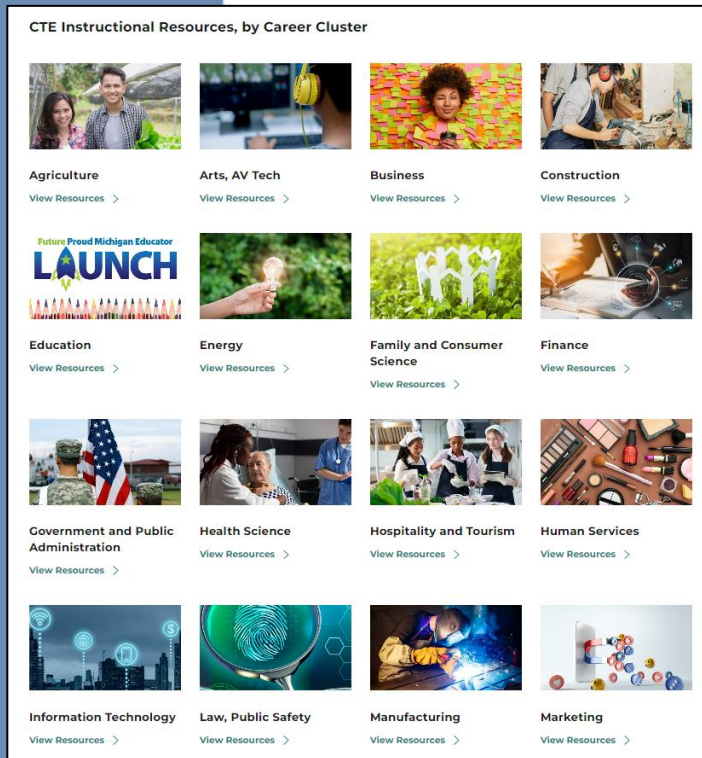
- GAP Analysis
- Instructional Design
- Reports by Segments

## **Perkins V**

- No GAP Analysis
- CIP Overview Document
- CIP Specific Instructional Design
- Reports by Competencies

# Which version is my program?

39



## Health Science

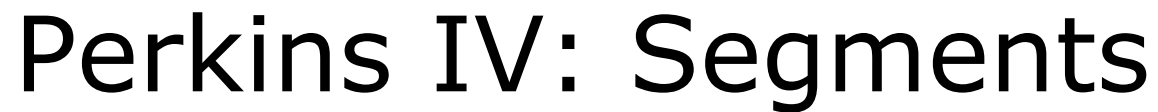
- [51.0000 - Health Services/Allied Health/Health Sciences, General](#) [CIP Overview and Instructional Design](#)
- [26.0102 - Biomedical Sciences General 2017](#)
- [51.0707 - Health Information/Medical Records Technology/Technician 2017](#)
- [51.1000 - Clinical/Medical Laboratory Science/Research and Allied Professions 2017](#)
- [EMT Student Assessment Requirements](#)



# Perkins V: Competency Statements

## (11 for Auto)

Supplementals	Brakes	Electrical and Electronic Systems	Automatic Transmissions, Transaxles, and Drivetrains
Demonstrate shop and personal safety skills as recognized by industry standards. <b>A1</b>	Demonstrate and understand the fundamentals of the braking system and related service information. <b>B1</b>	Demonstrate the knowledge of the fundamentals of electricity and automotive electrical systems. <b>D1</b>	Demonstrate an understanding of vehicle automatic transmissions, transaxles and drive train components and service information. <b>F1</b>
Demonstrate knowledge and skill in the use of automotive tools and equipment according to manufacturers recommendations. <b>A2</b>	Steering, Suspension and Alignment	Engine Repair	Manual Transmissions, Transaxles, and Drivetrains
Demonstrate automotive industry standards and shop policies regarding customer vehicles. <b>A3</b>	Demonstrate an understanding of vehicle steering and suspension components and service information. <b>C1</b>	Demonstrate the knowledge of engine repair and related service information. <b>E1</b>	Demonstrate an understanding of vehicle manual transmissions, transaxles and drive train components and service information. <b>F2</b>
		Engine Performance	Heating, Ventilation, and Air Conditioning (HVAC)
<b>Orange Code = PCC Competency Code</b>		Understand and obtain engine performance vehicle information. <b>E2</b>	Research and understand components and service information of HVAC systems. <b>F3</b>



# Classification of Instructional Program (CIP) Self-Review

[illegible][illegible]

The Classification of Instructional Programs (CIP) Self-Review is a tool developed to assist with Technical Review Assistance and Compliance (TRAC) monitoring of Career and Technical Education (CTE) programs and to help those programs determine focus areas for continuous program improvement. Program teachers must update the CIP Self Review via the MDE-CTE Portal **each year**.

Each Career Education Planning District (CEPD) administrator is required to review 20% of their CTE programs each year and each program must be reviewed at least once every five years.

- [MDE-CTE Portal](#)
- [CIP Program Endorsements for CTE Instruction](#)
- Instructions for Adding a User for the CIP Self-Review
- [CIP Self-Review Administrator Review Guide](#)
- [CIP Self-Review Form](#)
- [C02 - PD Log Template](#)
- [C03 - Program Advisory Committee Meeting Agenda and Minutes Template](#)
- [C03 - Program Advisory Committee Roster Template](#)
- [C04 - Instructional Design Template](#)
- [C04 - Safety Training](#)
- [C05 - Work Based Learning Template](#)



# Perkins V: Instructional Design Form

	1. CIP Code: 47.0604	4. Year:	4. Year:	4. Year:	4. Year:	4. Year:
	2. Program Name:	5. Term:	5. Term:	5. Term:	5. Term:	5. Term:
	Automotive Technician	6. Local Class Name:	6. Local Class Name:	6. Local Class Name:	6. Local Class Name:	6. Local Class Name:
	3. PSN:					
		7. Subsection (optional)	7. Subsection (optional)	7. Subsection (optional)	7. Subsection (optional)	7. Subsection (optional)
		A B C D	A B C D	A B C D	A B C D	A B C D
		8. Teacher Name:	8. Teacher Name:	8. Teacher Name:	8. Teacher Name:	8. Teacher Name:
10. PCC	9. Competencies					
A	A1					
A	A2					
A	A3					
B	B1					
C	C1					
D	D1					
E	E1					
E	E2					
F	F1					
F	F2					
F	F3					
Z	Z					

# Perkins Course Competencies (PCC)

Perkins Course Competencies (PCC)	Updated February 2022 Competency (*any Standard/Competency not covered in a Credential must be covered by/with teacher developed unit(s) of study)	Industry Standard Safety Certificate	ASE Entry Level Automobile Service Technology Area Tests	ASE Entry Level Certification MLR	State of Michigan Mechanics Test	Former Segments
<b>A</b>	Demonstrate <b>shop and personal safety skills</b> as recognized by industry standards.	ie: SP 2, OSHA 10 or teacher selected safety program				(12) Career Ready Practices, (9) Required Supplemental Tasks, (10) Facility and Mobile Equipment Maintenance and (11) Transportation Distribution & Logistics
	Demonstrate knowledge and skill in the use of <b>automotive tools and equipment</b> according to manufacturers recommendations.					(12) Career Ready Practices, (9) Required Supplemental Tasks, and (10) Facility and Mobile Equipment Maintenance
	Demonstrate automotive industry standards and <b>shop policies</b> regarding customer vehicles.					(12) Career Ready Practices, (9) Required Supplemental Tasks, (10) Facility and Mobile Equipment Maintenance, and (11) Transportation Distribution & Logistics
<b>B</b>	Demonstrate and understand the fundamentals of the <b>braking system</b> and related service information.		ASE Entry Level Certification Brakes (BR)		Brakes and Braking Systems	(5) Brakes
<b>C</b>	Demonstrate an understanding of vehicle <b>steering and suspension</b> components and service information.		ASE Entry Level Certification Steering and Steering (SS)		Front End, Suspension & Steering Systems	(4) Steering and Suspension



# Career Ready Practices Required for all CTE programs



- ✓ Demonstrate problem solving skills consistently and independently
- ✓ Demonstrate communication skills consistently and independently
- ✓ Demonstrate collaboration skills consistently and independently
- ✓ Demonstrate personal management skills consistently and independently

# Career Ready Practices

45

Knowledge	Skill	Performance Element	Measurement Criteria	26.0102 Biomedical Sciences, General (2017)	Standard Source
I				<b>Career Ready Practices</b>	<b>Advance CTE</b>
	A			<b>Career Ready Skills</b>	<b>Advance CTE</b>
		1		Act as a responsible and contributing citizen and employee.	1
		2		Apply appropriate academic and technical skills.	2
		3		Attend to personal health and financial well-being.	3
		4		Communicate clearly, effectively and with reason.	4
		5		Consider the environmental, social and economic impacts of decisions.	5
		6		Demonstrate creativity and innovation.	6
		7		Employ valid and reliable research strategies.	7
		8		Model integrity, ethical leadership and effective management.	8
		9		Plan education and career path aligned to personal goals.	9
		10		Use technology to enhance productivity.	10
		11		Utilize critical thinking to make sense of problems and persevere in solving them.	11
		12		Work productively in teams while using cultural/global competence.	12

Career Ready Practices are required for ALL Michigan Career and Technical Education programs (reformatted 2022-print one page, landscape)							
Competency	Problem Solving (PS)	Competency	Collaboration (CL)	Competency	Personal Management (PM)	Competency	Communication (CM)
PS Competency Statement	Demonstrate <b>problem solving skills</b> consistently and independently	CL Competency Statement	Demonstrate <b>collaboration skills</b> consistently and independently	PM Competency Statement	Demonstrate <b>personal management skills</b> consistently and independently	CM Competency Statement	Demonstrate <b>communication skills</b> consistently and independently
PS1 Standard	Employ valid and reliable research strategies	CL1 Standard	Work productively in teams while using cultural global competence	PM1 Standard	Attend to personal health and financial well-being	CM1 Standard	Communicate clearly and effectively and with reason
PS1A	Evaluate validity of sources	CL1A	Contribute to every team, whether formal or informal	PM1A	Understand the relationship between personal health, workplace performance and personal well being	CM1A	Communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods
PS1B	Use an informed process to research new information and test new ideas and practices	CL1B	Apply awareness of cultural differences to avoid barriers to productive and positive interaction	PM1B	Act on an understanding to regularly practice healthy diet, exercise, and mental health activities	CM1B	Communicate in the workplace with clarity and purpose to make maximum use of your own and others' time
PS1C	Discern accepting and using information to make informed decisions	CL1C	Increase the engagement and contribution of all team members	PM1C	Take regular action to contribute to personal financial well-being	CM1C	Write master conventions, word choice and organization, and use effective tone and presentation skills to articulate ideas
PS2 Standard	Consider the environmental, social and economic impacts of decisions	CL1D	Plan and facilitate effective team meetings (in person and virtual)	PM1D	Recognize that personal financial security provides the peace of mind required to contribute more fully to career success	CM1D	Interact with others; actively listen and speak clearly and with purpose
PS2A	Understand the interrelated nature of actions and their impact	CL2 Standard	Act as a responsible and contributing citizen and employee	PM2 Standard	Plan education and career paths aligned to personal goals	CM1E	Consider the audience for all communications and prepare accordingly to ensure the desired outcome
PS2B	Make decisions that positively impact or mitigate negative impact on the environment and others	CL2A	Understand the obligations and responsibilities of being a member of a community and demonstrate this understanding through interactions with others	PM2A	Take personal ownership of educational goals and career goals and regularly act on a plan to attain these goals	CM2 Standard	Use technology to enhance productivity
PS2C	Be aware of new resources, procedures, technologies, and materials and their impact on the environment, social condition and the organization	CL2B	Be conscientious of the impact of decisions on others and the environment	PM2B	Understand personal interests, preferences, and goals	CM2A	Maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems
PS3 Standard	Utilize critical thinking to make sense of problems & persevere in solving them	CL2C	Identify the near-term and long-term consequences of actions and seeking to act in ways that contribute to the betterment of the team, family, community, and workplace	PM2C	Display perspective regarding the career pathways available and the time, effort, experience, and other requirements to pursue each, including the path of entrepreneurship	CM2B	Flexible and adaptive in acquiring and using new technology
PS3A	Recognize problems in the workplace, understanding the nature of the problem and devising effective plans to solve the problem	CL2D	Be reliable and consistent in going beyond the minimum expectations and participating in activities that serve the greater good	PM2D	Recognize the value of each step in the educational and experiential process	CM2C	Proficient with ubiquitous technology applications
PS3B	Recognize problems as they occur and take action to quickly address the problem	CL3 Standard	Model integrity, ethical leadership and effective management	PM2E	Recognize that nearly all career paths require ongoing education and experience	CM2D	Understand and take actions to prevent or mitigate inherent risks of technology applications both personal and organizational
PS3C	Investigate the root cause of the problem prior to introducing solutions	CL3A	Consistently act in ways that align to personal and community-held ideals and principles	PM2F	Seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals		
PS3D	Carefully consider the options to solve the problem	CL3B	Employ strategies to positively influence others in the workplace				
PS3E	Follow through with the agreed upon solution to ensure the problem is solved, either by your own actions or that of others	CL3C	Understand integrity and act on this understanding in every decision				
					<b>COLOR KEY</b>		
					Problem Solving (PS) Standards PS1, PS2, PS3, PS4, PS5		



# What questions do you have?



**Candace Vinson**, Education Consultant  
[vinsonc@michigan.gov](mailto:vinsonc@michigan.gov)

**Dorthy Switalski**, Education Consultant  
[switalskid@michigan.gov](mailto:switalskid@michigan.gov)

**Lee Greenacre**, Education Consultant  
[greenacrel@michigan.gov](mailto:greenacrel@michigan.gov)

**Celena Mills**, Education Consultant  
[millsc1@michigan.gov](mailto:millsc1@michigan.gov)

**Mark Forbush**, Education Consultant  
[forbushm@msu.edu](mailto:forbushm@msu.edu)

**Tom Knight**, Education Consultant  
[knightt@michigan.gov](mailto:knightt@michigan.gov)

**Deb Miller**, Career Readiness Unit Supervisor  
[millerd66@michigan.gov](mailto:millerd66@michigan.gov)

Office of Career and Technical Education  
Career Readiness Unit

