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Diesel Service Technician Blueprint Information

Beginning in Fall 2016,

Year 1 will be taught and assessed using the 2016 Diesel Service Technician.*

Year 2 will be taught and assessed using the 2010 Diesel Service Technician.*

2010 Diesel Service Technician curriculum will be retired July 1, 2017.*

*This assessment plan is subject to change based on funding and policy changes/updates. Information for test coordinators will be disseminated on the ordering process for the national certification by the Research and Curriculum Unit at Mississippi State University.

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SEC – Diesel Service Technician Blueprints

This document contains the blueprints for the concentration areas
in secondary Diesel Service Technician.

Course Code(s)	Test Code	Program Name	Supplemental Materials/Notes
997200, 997202, 997203	11627Y1-2016	Diesel Service Technician	
997201, 997204, 997205	11627Y2-2010	Diesel Service Technician	

Curriculum	Perkins Assessment 2016-17		Teacher Evaluation Pilot 2016-17			
	Y1 Post-Test	Y2 Post-Test	Y1 Baseline	Y1 Post-Test	Y2 Baseline	Y2 Post-Test
Diesel Service Technician	MS-CPAS2*	MS-CPAS2*	MS-CPAS2*	MS-CPAS2*	MS-CPAS2*	MS-CPAS2*

* These assessments are subject to change based on funding and policy changes/updates.



MS-CPAS2 Blueprint Summary	
Assessment:	Diesel Service Technician
Test Code:	11627Y1-2016
CIP Code:	470605
Course Codes:	997200, 997202, 997203
Type:	CP
<p>The MS-CPAS2 Blueprint Summary indicates the number of assessment questions related to each unit on the assessment and indicates the relative emphasis placed on each unit. All of the listed competencies will appear on the assessment, but because of the length of the assessment, not every competency will be equally represented in the assessment.</p>	
<p>The MS-CPAS2 Blueprint Summary includes a variety of information, which is explained below:</p>	
Terms and Definitions	
Assessment:	This signifies the name of the assessment, which corresponds with the name of the pathway or program.
CIP Code:	Developed by the U.S. Department of Education's National Center for Education Statistics (NCES), CIP codes are a federal coding system utilized for assessment and reporting of fields of study and program completions activity tracking.
Test Code:	A unique code that serves to numerically identify a specific assessment
DOK Levels:	Based on Webb's Depth of Knowledge (DOK), this signifies the assessment item difficulty factor to be expected in each unit. The three levels are as follows: <i>1 = Recall and Reproduction, 2 = Skills and Concepts, 3 = Short-term Strategic Thinking</i> Some postsecondary programs will not use DOK levels until the next revision.
Instructional	The total number of hours assigned to a unit per the pathway's curriculum
Total Items:	The total number of items assigned to each unit on the assessment. It is calculated as follows: <i>(Unit Instructional Hours / Total Instructional Hours) * Total Active Items</i>
Active Items:	The number of items on the assessment that will be graded
Field-test Items:	The number of items that are being field-tested, or piloted, to determine their eligibility for inclusion as an Active Item on future assessments. These items are not graded and, thus, will not impact the student's final score.
Total Assessed Items:	The total number of items on the given assessment. It is calculated as follows: <i>Active Items + Field-test Items</i>
<p>For more information regarding this MS-CPAS2 Blueprint Summary, please contact the Mississippi Assessment Center by phone at 1.866.901.7433 or by e-mail at helpdesk@rcu.msstate.edu.</p>	



Assessment: Diesel Service Technician								
Test Code: 11627Y1-2016								
CIP Code: 470605								
Total Hours: 210		DOK Level(s)			Instructional Hours		Total Items	
Unit 1: Fundamentals of Diesel Systems and Components		1			25	10		
1. Not on CPAS.								
2. Introduce, describe, and express employment opportunities and responsibilities of the diesel service industry.								
3. Investigate and replicate leadership skills and personal development.								
4. Model general safety rules for working in a shop/lab and an industry setting.								
5. Interpret and apply service specifications and information.								
6. Demonstrate measurement practices used in the diesel service industry.								
7. Manage personal and business finances to include aspects of employer-employee decision making and consumer credit.								
Unit 2: Diesel Systems, Theories, and Components		1	2	3	115	44		
1. Inspect, analyze, and perform service to diesel engine systems and components.								
2. Analyze, diagnose, and perform skills related to cylinder head and valve train.								
3. Inspect, determine correct procedures, and perform the repair technique(s) related to an engine block.								
Unit 3: Electrical/Electronic Systems*		1	2	3	70	26		
1. Identify, analyze, and perform repair procedures to general electrical systems.								
						Active Items	80	
						Field-Test Items	20	
						TOTAL ASSESSED ITEMS	100	
*Unit 3 includes 140 instructional hours. Only the first half of Unit 3 (70 instructional hours) is tested on the MS-CPAS2.								

MS-CPAS2 Blueprint Summary

Assessment:	Diesel Service Technician
Test Code:	11627Y2-2010
CIP Code:	470605
Course Codes:	997201, 997204, 997205
Type:	CP

The MS-CPAS2 Blueprint Summary indicates the number of assessment questions related to each unit on the assessment and indicates the relative emphasis placed on each unit. All of the listed competencies will appear on the assessment, but because of the length of the assessment, not every competency will be equally represented in the assessment.

The MS-CPAS2 Blueprint Summary includes a variety of information, which is explained below:

Terms and Definitions

Assessment:	This signifies the name of the assessment, which corresponds with the name of the pathway or program.
CIP Code:	Developed by the U.S. Department of Education's National Center for Education Statistics (NCES), CIP codes are a federal coding system utilized for assessment and reporting of fields of study and program completions activity tracking.
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DOK Levels:	Based on Webb's Depth of Knowledge (DOK), this signifies the assessment item difficulty factor to be expected in each unit. The three levels are as follows: <i>1 = Recall and Reproduction, 2 = Skills and Concepts, 3 = Short-term Strategic Thinking</i> Some postsecondary programs will not use DOK levels until the next revision.
Instructional Hours:	The total number of hours assigned to a unit per the pathway's curriculum
Total Items:	The total number of items assigned to each unit on the assessment. It is calculated as follows: <i>(Unit Instructional Hours / Total Instructional Hours) * Total Active Items</i>
Active Items:	The number of items on the assessment that will be graded
Field-test Items:	The number of items that are being field-tested, or piloted, to determine their eligibility for inclusion as an Active Item on future assessments. These items are not graded and, thus, will not impact the student's final score.
Total Assessed Items:	The total number of items on the given assessment. It is calculated as follows: <i>Active Items + Field-test Items</i>

Fo+A132:K148r more information regarding this MS-CPAS2 Blueprint Summary, please contact the Mississippi Assessment Center by phone at 1.866.901.7433 or by e-mail at helpdesk@rcu.msstate.edu.



Assessment: Diesel Service Technician Test Code: 11627Y2-2010 CIP Code: 470605 Total Hours: 280	DOK Level(s)			Instructional Hours	Total Items
	1	2	3		
Unit 4: Preventive Maintenance and Inspection	1	2	3	70	20
1. Identify, evaluate, and repair engine systems and their components.					
2. Inspect, diagnose, and recommend repair procedures for components and systems related to the cab and hood.					
Unit 5: Advanced Diesel Engine Performance	1	2	3	70	20
1. Identify, inspect, determine the action, and perform the procedure as it pertains to lubrication systems, cooling systems, air induction, and exhaust systems.					
2. Determine failure cause(s), perform repair procedure, and evaluate procedure related to fuel systems and electronic fuel management systems.					
Unit 6: Auxiliary Components	1	2	3	140	40
1. Explore and analyze hydraulic systems, theories, and components.					
2. Identify and inspect truck brake systems and steering/suspension components.					
3. Identify and evaluate agriculture/construction power train and components.					
4. Identify, perform, and analyze welding and cutting techniques.					
Active Items					80
Field-Test Items					20
TOTAL ASSESSED ITEMS					100