



Computer Servicing Technology Blueprints

This document contains the 2016 blueprints for postsecondary Computer Servicing Technology.

Computer Servicing Technology

- **Career Certificate** (21525Y1-2016)
- **Technical Certificate** (21525Y2-2016)*

MS-CPAS Blueprint Summary

Assessment:	Computer Servicing Technology
Test Code:	21525Y1-2016
CIP Code:	470104
Certificate:	Career
Type:	PS

The MS-CPAS 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-CPAS 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.
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 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>

For more information regarding this MS-CPAS Blueprint Summary, please contact the Research and Curriculum Unit by phone at 1.866.901.7433 or by e-mail at helpdesk@rcu.msstate.edu.

Assessment: Computer Servicing Technology	DOK Level(s)		Instructional Hours	Total Items
Test Code: 21525Y1-2016				
Total Hours: 15				
CST 1123 Basic IT Hardware	1	2	3	8
1. Demonstrate and practice general safety procedures in the school and work-site environments. 2. Discuss basic elements of computer maintenance. 3. Perform system disassembly/inspection. 4. Install a power supply based on given specifications. 5. Select the appropriate components for a custom PC configuration, to meet customer specifications or needs. 6. Compare and contrast types of display devices and their features. 7. Install and configure common peripheral devices.				
CST 1213 Networking I	1	2	3	8
1. Introduce safety concerns. 2. Not on MS-CPAS 3. Analyze hardware, media, and software. 4. Describe ISO/OSI model. 5. List and describe protocols. 6. Discuss Internetworking devices. 7. Examine LAN/WAN testing and analysis procedures.				
CST 1333 Operating Systems	1	2	3	8
1. Use operating systems to perform basic system tasks. 2. Understand software and applications in relation to different operating systems. 3. Explain the function of utilities with in different operating systems. 4. Use advanced features of operating systems. 5. Differentiate between types of operating systems. 6. Compare and contrast various features and requirements of Microsoft Operating Systems. 7. Identify common features and functionality of the Mac OS and Linux operating systems.				
CST 1913 Mobile Device Support I	1	2	3	8
1. Discuss history of mobile computing software and hardware devices. 2. Explain the characteristics of various types of mobile devices. 3. Describe and explain Computer Network Types, Topologies, and the OSI Model. 4. Compare and contrast Radio Frequency and Antenna Technology Fundamentals. 5. Define and describe Standards and Certifications for Wireless Technology. 6. Define and classify Computer Network Infrastructure Devices. 7. Explain and define Network Traffic Flow and Control.				
CST 2223 Networking II	1	2	3	8
1. Categorize WAN technology types and properties. 2. Compare and contrast different wireless standards 3. Obtain an in-depth understanding of TCP/IP Networking. 4. Properly identify virtual network and remote access concepts. 5. Understand the concepts of network security. 6. Understand the concepts of voice and video over Internet Protocol. 7. Properly troubleshoot a variety of network related problems. 8. Obtain the knowledge necessary to ensure network integrity and availability. 9. Explain basic concepts related to network management.				
Active Items				40
Field-Test Items				10
TOTAL ASSESSED ITEMS				50

MS-CPAS Blueprint Summary

Assessment:	Computer Servicing Technology
Test Code:	21525Y2-2016
CIP Code:	470104
Certificate:	Technical
Type:	PS

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Assessment:	Computer Servicing Technology	DOK Level(s)			Instructional Hours	Total Items
Test Code:	21525Y2-2016	1	2	3	3	13
Total Hours:	9				3	13
CST 1613 Security Fundamentals		1	2		3	13
1. Describe and define network security. 2. Define and describe malware and social engineering attacks. 3. Demonstrate an understanding of network security fundamentals such as: A. Hardware devices related to network security. B. How network technologies enhance security. C. Basic network design elements. 4. Identify key procedures and concepts related to administering a secure network. 5. List and define key concepts of wireless network security.						
CST 1923 Mobile Device Support II		1	2		3	13
1. Describe and explain Mobile Device Management concepts. 2. Configure and deploy mobile applications and associated technologies. 3. Identify various encryption methods for securing mobile environments. 4. Execute best practice for mobile device backup, data recovery and data segregation. 5. Explain monitoring and reporting techniques to address security requirements. 6. Explain risks, threats and mitigation strategies affecting the mobile ecosystem. 7. NOT TESTED ON MS-CPAS						
CST 2423 Cloud Computing II		1	2		3	14
1. Install, configure, and manage a Cloud-based system. 2. Identify and describe advanced hardware management concepts. 3. Describe and define concepts related storage provisioning and networking for Cloud infrastructure. 4. Compare and contrast deployment and testing strategies for common Cloud computing models. 5. Describe and define Cloud computing standards and security strategies. 6. Define and describe the appropriate business model found in Cloud computing. 7. Compare and Contrast advantages and disadvantages of utilizing Cloud computing.						
					Active Items	40
					Field-Test Items	10
					TOTAL ASSESSED ITEMS	50