

Microsoft Systems Engineer

Contact: [Randy Larson](#) (623)-935-8077

Award Type: **Certificate of Completion**

Effective First Year/Term: 2004 Fall

Overall G.P.A.: 2.00

Initiating College: **Chandler-Gilbert Community College**

Program Availability: Shared by: CGCC, EMCC, GCC, GWCC, PC (Mor), PVCC, RSC (Mor), SCC

Total Credits: 32-33

Major Code: **5843**

Faculty Initiator: Deidre Grafel

CIPS Code: 11.10.02

Instructional Council: Computer Information Systems (12)

Development Date: 10-14-03

District Curriculum Committee Online Agenda Date: 3-29-04 to 4-01-04

MCCCD Governing Board Approval Date: 5-25-04

Description: The Certificate of Completion in Microsoft Systems Engineer provides training for an intermediate- to supervisory-level position working with Windows networks. The program develops skills to install, configure, customize, optimize, and troubleshoot Windows servers, Windows client workstations and Microsoft Backoffice products. The courses in the program also help to prepare for Microsoft Certified Product Specialist (MCP), Microsoft Certified Systems Administrator (MCSA), and Microsoft Certified Systems Engineer (MCSE) examinations. The curriculum is taught by Microsoft Certified Professionals.

Job Description: A Microsoft Systems Engineer will be required to perform various tasks such as developing a local area network, installing and configuring software, creating and managing user and group accounts, analyzing and optimizing system performance, troubleshooting system and printing problems, training end users, and working as a system administrator.

Program Notes:

Students must earn a grade of "C" or better for all courses required within the program.

Overall program minimum G.P.A. = 2.00.

+ indicates course has prerequisites and/or corequisites.

++ indicates any module.

Admission Criteria: None.

Program Prerequisites: Credits: 3

CIS105	Survey of Computer Information Systems	3
OR		
	Permission of Department or Division	

Required Courses: Credits: 32-33

	BPC/CIS121AB	MS-DOS Operating System	1
+	BPC170	Computer Maintenance I: A+ Prep	3
+	CIS190	Introduction to Local Area Networks (3) or	
	CNT140	Cisco Networking Basics (4) or	
	MST140	Microsoft Networking Essentials (3)	3-4
	MST150++	Any MST150 course	3
+	MST152++	Any MST152 course	4
+	MST155	Implementing Windows Network Infrastructure	3
+	MST157	Implementing Windows Directory Services	3
+	MST232	Managing a Windows Network Environment	3
+	MST244	Microsoft SQL Server Administration	3

+ MST253	Designing a Microsoft Windows 2000 Directory Services Infrastructure (3) OR	
+ MST255	Designing Windows Network Infrastructure	3
+ MST259	Designing Windows Network Security (3)	3

Restricted Electives: None.

Free Electives: None.

Program Competencies

1. Implement DOS commands and functions. (BPC/CIS121AB)
 2. Identify basic personal computer architecture and components. (BPC170)
 3. Troubleshoot problems with various common hardware and software configurations. (BPC170)
 4. Analyze local area network (LAN) topologies and communication standards. (CIS190 or CNT140 or MST140)
 5. Create and manage user and group accounts. (MST150+, MST152++)
 6. Monitor network resources and events. (MST152++, MST155, MST232)
 7. Implement and troubleshoot network printers. (MST150++)
 8. Secure network resources with share permissions and New Technology File System (NTFS) permissions. (MST150++)
 9. Install, configure, and optimize a Windows network operating system. (MST152++)
 10. Establish trusts between domains. (MST155)
 11. Install and configure Dynamic Host Configuration Protocol (DHCP) and Dynamic Name System (DNS) in a Microsoft Windows network infrastructure. (MST155, MST232)
 12. Install and configure Microsoft Windows Active Directory services. (MST155, MST157, MST232)
 13. Install and configure Microsoft Structured Query Language (SQL) Server. (MST244)
 14. Plan and implement an Active Directory namespace for an enterprise environment. (MST253)
- OR
15. Analyze business requirements and processes to design a security solution for a Microsoft Windows network. (MST259)
 16. Create a networking services infrastructure design. (MST255)

Modified by R. Larson 11/29/2006 8:52 AM