

## Microsoft Networking Technology

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

Award Type: **Associate in Applied Science**

Effective First Year/Term: 20056

Overall G.P.A.: 2.00

Initiating College: **Chandler Gilbert Community College**

Program Availability: Shared by: CGCC, EMCC, GCC, GWCC, PVCC, SCC

Total Credits: 62

Major Code: **3778**

Faculty Initiator: Deidre Grafel

CIPS Code: 11.09.01

Instructional Council: Computer Information Systems (12)

Development Date: 4-27-05

District Curriculum Committee Online Agenda Date: 5-23-05 to 5-26-05

MCCCD Governing Board Approval Date: 6-28-05

**Description:** The Associate in Applied Science in Microsoft Networking Technology develops skills to implement a network infrastructure and install, configure, monitor, optimize, and troubleshoot Windows server and Windows client workstations. 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 Networking administrator 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, interoperating with various operating systems, and working as a system administrator.

### Program Notes:

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

+ indicates course has prerequisites and/or corequisites.

++ indicates any module

### Admission Criteria: None

### Program Prerequisites:

CIS105 Survey of Computer Information Systems 3

OR

Permission of Department or Division

### Required Courses: Credits: 24-25

Courses selected cannot apply in both Required Courses and Restricted Electives area.

	BPC/CIS121AB	MS-DOS Operating System	1
+	BPC170	Computer Maintenance I: A+ Prep	3
	CIS102	Interpersonal and Customer Service Skills for IT Professionals	1
	CIS126DA	UNIX Operating System (3) OR	
	CIS126AA	UNIX Operating System: Level I (1) AND	
+	CIS126BA	UNIX Operating System: Level II (1) AND	
+	CIS126CA	UNIX Operating System: Level III (1) OR	
	CIS126DL	Linux Operating System (3) OR	
	CIS126AL	Linux Operating System II (1) AND	
+	CIS126BL	Linux Operating System II (1) AND	
+	CIS126CL	Linux Operating System III (1)	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	
+ MST155	Implementing Windows Network Infrastructure	3
+ MST157	Implementing Windows Directory Services	3

**Restricted Electives: Credits: 13**

Students should select thirteen (13) credits from the following courses in consultation with a program advisor:

BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
+ BPC171	Recycling Used Computer Technology	1-3
+ BPC270	Microcomputer Maintenance II	3
+ CIS150	Programming Fundamentals	3
+ CIS159	Visual Basic Programming I	3
+ CIS162AB	C++: Level I (3) OR	
+ CIS162AC	Visual C++: Level I (3)	3
CIS280++	Any CIS280 Current Topics in Computing course	1-3

Students may select no more than four (4) credits combined from CIS282AA-AC, CIS290AA-AC and CIS296WA-WD courses.

+ CIS282++	Volunteerism for Computer Information Systems: A Service Learning Experience (Any module) (1-3) OR	
+ CIS290A++	Computer Information Systems Internship (Any module) (1-3) OR	
+ CIS296W++	Cooperative Education (Any module) (1-4)	1-4
+ CNT150	Cisco Networking Router Technologies	4
+ MST141	Supporting Microsoft Windows Desktop Operating Systems	3
+ MST142	Supporting Applications on Microsoft Windows Desktop Operating Systems	3
MST150++	Any MST150 course	3

Selected course will not apply in both required courses and restricted electives.

+ MST152++	Any MST152 course	4
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Selected course will not apply in both required courses and restricted electives.

+ MST157	Implementing Windows Directory Services	3
+ MST232	Managing a Windows Network Environment	3
+ MST242	Microsoft Exchange Server	4
+ MST244	Microsoft SQL Server Administration	3
+ MST252	Microsoft Windows Network Upgrade	3
+ MST253	Designing a Microsoft Windows 2000 Directory Services Infrastructure	3
+ MST254	Microsoft SQL Server Design and Implementation	3
+ MST255	Designing Windows Network Infrastructure	3
+ MST259	Designing Windows Network Security	3
+ MST298A++	Special Projects (Any module)	1-3

**Free Electives: None**

**General Education: Credits: 25**

**CORE: Credits: 15**

First-Year Composition

- + ENG101 First-Year Composition (3) AND
- + ENG102 First-Year Composition (3) OR
- + ENG107 First-Year Composition for ESL (3) AND
- + ENG108 First-Year Composition for ESL (3) 6

Oral Communication

- Any approved general education course in the Oral Communication area 3

Critical Reading

- + CRE101 Critical and Evaluative Reading I (3) OR
- Equivalent as indicated by assessment 3

Mathematics

- + Any approved general education course in the Mathematics area 35

**DISTRIBUTION: Credits: 10**

Humanities and Fine Arts

- Any approved general education course in the Humanities and Fine Arts area 3

Social and Behavioral Sciences

- Any approved general education course in the Social and Behavioral Sciences area 3

Natural Sciences

- Any approved general education course from the Natural Sciences area 4

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**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. Use effective communication skills. (CIS102)
5. Configure a UNIX operating system. (CIS126DA or CIS126AA, and CIS126BA and CIS126CA)
- OR
6. Configure a Linux operating system. (CIS126DL or CIS126AL and CIS126BL and CIS126CL)
7. Analyze local area network (LAN) topologies and communication standards. (CIS190, CNT140, or MST140)
8. Create and manage user and group accounts. (Any MST150++ course, any MST152++ course)
9. Monitor network resources and events. (Any MST152++ course)
10. Secure network resources with share permissions and New Technology File System (NTFS) permissions. (Any MST150++ course)
11. Install, configure, and optimize Windows network operating system. (Any MST150++ course, any MST152++ course)
12. Implement and troubleshoot network printers. (Any MST150++ course, any MST152++ course)
13. Establish trusts between domains. (MST155)
14. Implement system policies and user profiles. (Any MST152++ course)
15. Install and configure Dynamic Host Configuration Protocol (DHCP) and Dynamic Name System (DNS) in a Microsoft Windows network infrastructure. (MST155)
16. Install and configure Microsoft Windows Active Directory services. (MST155, MST157)

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