Network Systems Administration A.A.S. Degree

Program: This Network Systems Administration A.A.S. Degree prepares students for an entry-level position as a network administrator. Graduates may enter a Baccalaureate Degree program and/or sit for Network+ Certification and A+ Network Certification examinations.

Effective Term: Fall
Effective Year: 2013
Semester Hours: 65

Prerequisites: RDG094
Corequisites: None

Recommended: For students transferring to UofA BAS Network Administration program, SPA101 and SPA102 are strongly recommended.

Proficiencies: SPA101 and SPA102 are strongly recommended.

List of Course Requirements for the Catalog: General Education Requirements (19-23)

Written Communications (3)
ENG101 English Composition III (3)
ENG121 Applied Technical Writing (3)

Oral Communications (3)
COM263 Intercultural Communication (3) (Recommended)
or select a COM or an AGEC course.

Arts and Humanities (3)
PHI105 Introduction to Ethics (3)(Recommended)
Or select an Art or Humanities course, or an AGEC course.

Social and Behavioral Sciences (3)
ECN201 Principles of Macroeconomics (3)
Or select a Social/Behavioral Science course, or an AGEC course.

Physical and Biological Sciences (4)
Select a Biological or Physical Science courses numbered 100 or above, or an AGEC course.
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Mathematics (3-4)  
Select a college-level Mathematics course  
BUS101 Business Mathematics (3)  
MAT121 Intermediate Algebra, Standard (4) or higher

Core Requirements (45)  
BUS100 Introduction to Business (3)  
BUS207 Business Communications (3)  
CIS120 Survey of Computer Information Systems (3)  
(Fulfills Computer Competency requirement)  
CIS121 Microcomputer Operating System Fundamentals (3)  
CIS123 Introduction to Programming (3)  
CIS130 Networking Essentials (3)  
CIS135 Principles of Telephony and Telecommunications (3)  
CIS150 Windows Server (3)  
CIS152 Networking Infrastructure (3)  
CIS153 Network Security (3)  
CIS213 Linux Server (3)  
CIS215 CISCO Routers (3)  
CIS219 Exchange Server (3)  
CIS220 Security for Wireless Networks (3)  
ECN202 Principles of Microeconomics (3)

Electives  
Select college-level courses to total 65 credits to earn this degree.

Other Requirements (4)  
PAC or DAN Course (1)  
Reading Competency: RDG094 College Reading

Computer Competency (3):  
CIS120 Survey of Computer Information Systems (3)

For students transferring to the University of Arizona B.A.S. Network Administration program, SPA101 and SPA102 are strongly recommended.

Students must earn a cumulative grade point average (CGPA) of at least a 2.0 on a 4.0 scale.  
Students must earn a minimum of 20 credits from CAC.

This A.A.S. Degree requires 65 credits.

**Measureable** 1. (Synthesis Level) Design and construct a secure and efficient wireless
Student Learning network, including hardware and software.

Outcome Statements for Program: 2. (Comprehension Level) Summarize the basic concepts and the history of telecommunications and career opportunities in the telephony field.
3. (Synthesis Level) Manage users, groups, login security and system resources in Linux.
4. (Comprehension Level) Describe each of the seven layers of the OSI model.
5. (Synthesis Level) Configure SMTP, POP3, MAPI and Internet clients in the most current version of Exchange Server.
6. (Application Level) Install, configure and troubleshoot a CISCO router for a network environment.
7. (Application Level) Install and test the most current version of Windows server and Windows workstation, including users, DNS and trust relationship.
8. (Analysis Level) Analyze network security options and techniques to create security plans.
9. (Comprehension Level) Describe Windows operating systems, their features, prominent system properties and common operating system commands.
10. (Application Level) Plan, write, revise and deliver oral, written and electronic business communications.
11. (Application Level) Apply math concepts to solve business problems.
12. (Comprehension Level) Describe the Networking environment, including laws and regulations in which businesses operate in local, regional and global markets.

Internal/External Standards/Accreditation for Program: Networking Certification exams, URL:
http://certification.comptia.org/getCertified/certifications/a.aspx
http://certification.comptia.org/getCertified/certifications/network.aspx

Optional for Advanced Students:

Revised: May 21, 2013