

Computing and Information Technology - Networking - Router/Switch

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

REQUIRED CREDITS: 64

DEGREE CODE: CITNRS-AAS

DESCRIPTION

This program course of study provides students with education and skills required by today’s computer networking industry. Instruction includes courses on router/switch centric internetworking. It provides students with a wide array of training in various areas related to computer networking. Completion of this program prepares students for successful completion of a number of industry certification exams such as: CompTIA A+, Network+, Cisco CCENT, and CCNA. Instruction takes place in a hands-on state-of-the-art lab environment.

STUDENT LEARNING OUTCOMES

- Differentiate the functions of networking components.
- Assemble a computer networking system.
- Specify configuration parameters to include: IP addressing, AAA, QoS prioritization, capacity and redundancy.
- Modify operating system configurations in client, server, and intermediary devices.
- Optimize hardware configurations in client, server, and intermediary devices.
- Optimize operating system configurations in network intermediary devices.

PLEASE NOTE - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

GENERAL EDUCATION REQUIREMENTS (23 CREDITS)

MATHEMATICS (3 credits)

Required: MATH 116 Technical Mathematics

ENGLISH COMPOSITION (3 credits)

Required: ENG 107 Technical Communications I

COMMUNICATIONS (3 credits)

Required: COM 115 Applied Communication

HUMAN RELATIONS (3 credits)

ALS 101; ANTH 101, 112, 201, 205; COM 102; HIST 105, 106, 107, 150, 151, 210, 247, 260; HMS 130; MGT 100B, 283; PHIL 135, 210, 216, 245; PSC 201; PSY 101, 102, 207, 208, 261; SOC 101 or above; WMST 113

NATURAL SCIENCE (4 credits)

Required: EGG 131 and 131L

FINE ARTS/HUMANITIES/SOCIAL SCIENCES (3 credits)

See AAS policy p. 51 for courses

U.S. AND NEVADA CONSTITUTIONS (4-6 credits)

See AAS policy p. 51 for courses

SPECIAL PROGRAM REQUIREMENTS (41 CREDITS)

CORE REQUIREMENTS (41 credits)

| | | |
|--|--|---|
| CIT 112B | Network+ | 3 |
| CIT 114B | IT Essentials | 4 |
| CIT 173 | Introduction to Linux | 3 |
| CIT 211 | MCITP/MCTS Windows Workstation OS | 3 |
| CIT 217 | Security+ | 3 |
| CIT 263B | Project Management | 3 |
| CSCO 105B | Fundamentals of Voice and Data Cabling | 3 |
| CSCO 120 | CCNA Internetworking Fundamentals | 4 |
| CSCO 121 | CCNA Routing and Switching Essentials | 4 |
| CSCO 220 | CCNA Scaling Networks | 4 |
| CSCO 221 | CCNA WAN Fundamentals | 4 |
| IS 115 | Introduction to Programming | 3 |
| Choose one from the following (0-3 credits) | | |
| IS 100B | Core Computing Competency | 0 |
| IS 101 | Introduction to Information Systems | 3 |

See Degree Plan on next page.

- NOTE**
- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
 - Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit www.csn.edu/honors.
 - In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement (only AA, AS, and AB degrees) which may be used to fulfill the corresponding general education or emphasis requirement.
 - Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.



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FULL-TIME STUDENT DEGREE PLAN

Add more semesters to modify this plan to fit part-time student needs.

| FIRST SEMESTER | Credits |
|------------------------------------|----------------|
| MATH 116 Technical Mathematics | 3 |
| ENG 107 Technical Communications I | 3 |
| COM 115 Applied Communication | 3 |
| CIT 114B IT Essentials | 4 |
| IS 115 Introduction to Programming | 3 |
| IS 100B or IS 101 | 0-3 |
| TOTAL CREDITS | 16-19 |

| SECOND SEMESTER | Credits |
|---|----------------|
| EGG 131 and 131L | 4 |
| Complete AAS US/Nevada Constitutions ¹ p. 51 | 4-6 |
| CIT 112B Network + | 3 |
| CIT 173 Introduction to Linux | 3 |
| CSCO 105B Fundamentals of Voice and Data Cabling | 3 |
| TOTAL CREDITS | 17-19 |

| THIRD SEMESTER | Credits |
|---|----------------|
| Complete Human Relations (see courses previous page) | 3 |
| Complete AAS Fine Arts/Humanities/Social Science p. 51 | 3 |
| CIT 211 MCITP/MCTS Windows Workstation OS | 3 |
| CSCO 120 CCNA Internetworking Fundamentals | 4 |
| CSCO 121 CCNA Routing and Switching Essentials ² | 4 |
| TOTAL CREDITS | 17 |

| FOURTH SEMESTER | Credits |
|---|----------------|
| CIT 217 Security+ | 3 |
| CIT 263B Project Management | 3 |
| CSCO 220 CCNA Scaling Networks | 4 |
| CSCO 221 CCNA WAN Fundamentals ³ | 4 |
| TOTAL CREDITS | 14 |

DEGREE PLAN TOTAL CREDITS..... **64-69**

¹PSC 101 completes this requirement at 4 credits. If choosing the HIST option, complete HIST 101 or 111 in the second semester and complete HIST 102 or 217 in the third or fourth semester.

²Prerequisite CSCO 120. Contact the Department of Computing and Information Technology for permission to complete this class in the same semester as the prerequisite course.

³Prerequisite of CSCO 220. Contact the Department of Computing and Information Technology for permission to complete this class in the same semester as the prerequisite course.

