Networking Specialist
Executive Summary

The Networking Specialist Certificate and Degree program has not been revised in some time. Supported by discussions with the Networking Advisory Board and an enhanced working relationship with Fort Riley instructors, it was determined that changes and upgrading of the degree and certificate were needed.

Course Changes

- Help Desk Fundamentals will be increased from a two credit hour offering to a three credit hour offering
    - This will provide greater opportunity to address Customer Service and Essential Skills within this course
- Networking Security I and II will be decreased from four credit hour offerings to three credit hour offering
    - Information Security was added to the Networking course offerings in spring 2012. This is an introductory security class in which students earn a National Security Agency endorsed certification by passing this course. With this class added to the curriculum, Network Security I and II may be reduced to a three credit hour offering. This will allow for a total of nine credit hours within the degree and certificate with a focus on security.
- A new networking course, XXXX, will be added to the curriculum.
    - Through meetings between Great Bend and Fort Riley faculty, it was discovered that different material was being covered between the existing three networking classes. The outcome of these meetings led to a recommendation that all material collectively covered by the two sites should be required for the degree and four courses (12 credit hours) rather than the current three course offering should be implemented.

Certificate Changes

- The following courses will be removed from the certificate curriculum:
    - Customer Service
    - Human Relations in Business
- The following courses will be added to the certificate curriculum:
    - Information Security
    - Network Security I
    - Network Security II
- The following courses will experience a credit hour change
    - Help Desk Fundamentals will increase one credit hour from the current 2 hour to 3 hours
- Net effect of change
    - The Networking Certificate will go from a 32 credit hour program to a 36 hour credit program

Degree Changes

- The following courses will be added to the degree curriculum as major requirements
  - Information Security (previously listed as an elective)
  - Network Security II (previously listed as an elective)
  - New networking course (as outlined under course changes)

- The following courses will be moved from a requirement to an elective
  - Spreadsheet Applications
  - Basic Programming
  - Database Management
  - Advanced Database Management
  - Student will select one of two server courses

General Education Requirements

- The required Personal Finance course will be removed from the curriculum and replaced with student choice of any Humanity or Social Science course.

Overall rationale for changes to the Networking Degree Curriculum:

- Places greater emphasis on security issues and allows students the opportunity to earn two security-related industry certifications
  - Information Security is an introductory course that allows students to receive the NSTISSI 4011 Certification offered by the Committee of National Security Systems (CNSS) under the authority of the National Security Agency.
  - Network Security I and Network Security II are advanced courses that prepare students to test for the Security+, CompTIA certification
  - Students will complete a total of nine credit hours of courses that focus on security.
- An additional networking course was added to the curriculum after meetings between Great Bend and Fort Riley faculty. Different material was being covered between the three existing networking classes at the two Barton locations. It was decided that all material being collectively covered should be required for the degree. This required the addition of a fourth networking course
- Auxiliary courses (spreadsheet applications, Basic programming, etc.) were changed from major requirements to elective courses to allow the additional required security class. This will provide more flexibility to students within the major.
- The total number of network server classes required for a degree was reduced from four courses to three courses. Barton's Networking Advisory Board recommend only nine hours of network server classes be offered as requirements for the major. This change provides an introductory class for two different operating systems and an advanced course in one of the two operating systems. Students may choose to complete the remaining network server course as an elective.

Industry Certifications

The rationale for the changes to the Networking Certificate and Degree is to emphasize industry certificate options for students upon completion of coursework as shown below:

Possible Computer Networking Specialist Certifications

36 Hour Certificate	
Classes	**Certification**
Computer Repair & Upgrade I & II	A+
Networking I & II	Net+
Information Security	NSTISSI 4011
Network Security I & II	Security+
Spreadsheet Applications	MOS Excel
Database Management Systems	MOS Access

A.A.S. Networking Specialist	
Classes	**Certification**
Computer Repair& Upgrade I & II	A+
Networking I & II	Net+
Information Security	NSTISSI 4011
Network Security I & II	Security+
LAN Workstation	MCTS Windows 7 (Exam 70-680)
Windows Server I & II	*MCTS Windows Server 2008 (Exam #70-642)*
Linux Server I & II	*Linux+*
Spreadsheet Applications	*MOS Excel*
Database Management Systems	*MOS Access*

Italics – based on electives

Networking Specialist

BARTON COMMUNITY COLLEGE

Certificate (Total Credit Hours – 36)

REQUIREMENTS			
☐ NTWK	1052	Computer Repair and Upgrade I	3
☐ NTWK	1053	Computer Repair and Upgrade II	3
☐ NTWK	XXXX	Introduction to Networking	3
☐ NTWK	XXXX	Networking I	3
☐ NTWK	XXXX	Networking II	3
☐ NTWK	1072	Information Security	3
☐ NTWK	1070	Network Security I	3
☐ NTWK	1071	Network Security II	3
☐ NTWK	1068	Help Desk Fundamentals	3
☐ BSTC	1036	Computer Concepts & Applications	3
☐ BSTC	1685	Spreadsheet Applications	3
☐ BSTC	1023	Database Management Systems	3
☐			
☐			
TOTAL			**36**

DRAFT

Student Name:_____ **ID#:**_____ **Placement Scores:** ___English ___Math ___Reading

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Networking Specialist

BARTON COMMUNITY COLLEGE

Associate in Applied Science (Total Credit Hours – 64)

GENERAL EDUCATION REQUIREMENTS
At least 15 credit hours from at least 3 of the 5 General Education curriculum areas

WRITTEN / ORAL COMMUNICATIONS

☐ ENGL	1200	Business English **OR**	3
☐ ENGL	1204	English Composition I	
☐ ENGL	1236	Technical Communications **OR**	3
☐ ENGL	1206	English Composition II	
☐ COMM	1230	Public Speaking **OR**	3
☐ COMM	1200	Interpersonal Communications	
TOTAL			**9**

HUMANITIES

Fine Arts			
☐			
☐			
Language Arts			
☐			
☐			
Philosophy / History / Religion			
☐			
☐			
TOTAL – one Humanity or Social & Behavioral Science			**(3)**

SOCIAL and BEHAVIORAL SCIENCES

Social Science			
☐			
☐			
Behavioral Science			
☐			
☐			
Economics / Political Science			
☐			
☐			
TOTAL – one Humanity or Social & Behavioral Science			**(3)**

MATHEMATICS / NATURAL SCIENCE

☐ MATH	1806	Technical Mathematics **OR**	3
☐ MATH	1823	Fundamentals of Mathematics **OR**	
☐ MATH	1828	College Algebra	
☐			
☐			
TOTAL			**3**

PHYSICAL EDUCATION (maximum of two credit hours) OR HEALTH (maximum of three credit hours)

☐			
☐			
TOTAL			

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REQUIREMENTS for SPECIFIC MAJOR:

MAJOR REQUIRMENTS

☐ NTWK	1052	Computer Repair and Upgrade I	3
☐ NTWK	1053	Computer Repair and Upgrade II	3
☐ NTWK	XXXX	Introduction to Networking	3
☐ NTWK	XXXX	Networking I	3
☐ NTWK	XXXX	Networking II	3
☐ NTWK	1072	Information Security	3
☐ NTWK	1070	Network Security I	3
☐ NTWK	1071	Network Security II	3
☐ NTWK	1068	Help Desk Fundamentals	3
☐ NTWK	1046	Local Area Network Workstation	3
☐ NTWK	XXXX	Windows Server I	3
☐ NTWK	1030	Linux I	3
☐ NTWK	XXXX	Windows Server II **OR**	3
	1061	Linux II	
☐			
☐			
TOTAL			**39**

MAJOR ELECTIVES

☐ NTWK	XXXX	Windows Server II** **or**	3
	1061	Linux II**	
☐ NTWK	1080	Occupational Internship	1-3
☐ NTWK	1054	Computer Forensics & Investigation	3
☐ BSTC	1036	Computer Concepts & Applications	3
☐ BSTC	1685	Spreadsheet Applications	3
☐ BSTC	1023	Database Management Systems	3
☐ BSTC	1025	Advanced Database Management	3
☐ BSTC	1001	Introduction to Computers	3
☐ BUSI	1807	Customer Service	3
☐ PRGM	1005	Basic Programming **OR**	3
	1025	C Programming **OR**	
	1030	Java Programming	
☐			
TOTAL			**10**

**Class not completed in the Major Requirements section

Student Name:_____ **ID#:**_____ **Placement Scores:** ___English ___Math ___Reading

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