COURSE SYLLABUS

COURSE: **CTI 120** **NETWORK & SEC FOUNDATION**

HOURS: Lecture: **2** Lab/Shop: **2** Work Exp/Clinical: **0** Credits: **3**

COURSE DESCRIPTION:

This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

PREREQUISITE(S): DMA 010-040 or MAT 070 or MAT 003 Tier 2 or BSP 4003 Tier 2, or MAT 043

COREQUISITE(S): None

TEXTBOOK(S) & OTHER SPECIAL REQUIREMENTS:

Open Educational Resources (OER) are listed in the course Moodle.

COURSE GOALS:

1. Learn the fundamentals of computer networks.
2. Learn the fundamentals of computer security.

STUDENT LEARNING OUTCOMES:

Upon successful completion of this course, the student will be able to:

1. Perform basic calculations necessary for network operations.
2. Identify the components of local and wide area networks.
3. Identify security risks to a networked information system.
4. Demonstrate the need for computer and network security and how to harden information systems and networks from malicious software attacks, including updating systems, using digital signatures, creating operating system backups, and developing security policies.
5. Describe how to administer a secure network through the use of common network protocols and the techniques of effective network administration.
6. Complete a presentation demonstrating the global implications of computer networks and security.

***Please refer to the online version of the Richmond Community College Program & Course Catalog and the Student Handbook for current academic and general information.