Information Technology

An Associate degree in Information Technology from River Valley Community College will prepare students to enter the workforce in an entry level position in the field of information technology upon graduation and also provide pathways to bachelor's degree programs. The permeation of technology into nearly every industry has created the need for employers to hire staff to maintain those systems. There are many different titles for which an information technology associate degree graduate can be hired and these positions are often the first line of support to keep the various technology platforms functioning at peak performance. Due to the importance of this position within a company, students will understand best practices for troubleshooting various technology related issues, performance aspects of multiple operating systems, principles of information assurance, basic aspects of web development, computer networking, best practices for maintaining current technology resources, how to communicate professionally, how to create and use relational databases, how to administer and maintain servers and how to deploy emerging technology on various platforms. Additionally, students will have the opportunity to gain real world experience in an internship setting or create a culminating project of their learning in a capstone course. Students must earn a grade of "C" or higher in all CYBS/CSCI technology courses required for graduation to progress within the program and graduate.

Program Mission

To develop and train information technology professionals who can help companies manage and protect their systems.

Program / Student Outcomes

The program will provide students with a strong foundation of understanding in information technology. Students will learn:

- the broad discipline of information technology and develop a foundation of knowledge of the field
- to write clearly and effectively for defined audiences through a variety of strategies
- the purpose behind their field of study, how to best interact with the people in their work environment and the career path that is best aligned with their personal goals
- how to use multiple operating systems commonly found in the Information Technology field today
- basic security principles for information assurance
- the basics of descriptive and inferential statistics
- the basics of the web development process
- computer networking through the introduction of the Open Systems Interconnection (OSI) model, the TCP/IP protocol suite, routing and switching protocols, Wide Area Network services, and network design & implementation
- a programming language and be able to design and implement simple programs dealing with numerical and string processing
- to use a variety of writing styles for communication within the professional community
- to implement, maintain and protect a Microsoft Windows Server Domain
- graphical and command line SQL methods of creating relational databases
- to perform ordinary tasks in the Linux operating systems
- the methods in which emerging technologies can be deployed on current and future platforms
- how to succeed in an information technology position through an Internship or Capstone course

Program: Computer Technology
Type: Associate of Science

First Year: Fall Semester

Item #	Title	Credits
CSCI 101R	Computer Architecture and Operating Systems	3
CSCI 103R	Introduction to Web Development	3
CSCI 110R	Introduction to Networks	3
CSCI 186R	Introduction to Operating Systems	3
MATH 110R	Functions & Modeling I	4

First Year: Spring Semester

Item #	Title	Credits
CSCI 106R	Communication Infrastructure	3
CSCI 175R	Introduction to C++	4
MATH 106R	Statistics I	3-4
	Science Elective	3-4
ENGL 102R	College Composition	3-4

Second Year: Fall Semester

Item #	Title	Credits
CYBS 101R	Principles of Information Assurance	3
CSCI 203R	Introduction to Linux	3
CSCI 204R	Administering Windows Servers	3
CSCI 197R	Relational Database Design with SQL	3
ENGL 122R	Professional Writing & Communications	3

Second Year: Spring Semester

Item #	Title	Credits
CYBS 120R	Network Security	3
CSCI 296R	Technology Capstone	3
	Social Science Elective	3
	Humanities/Fine Arts/World Language Elective	3
	English/Humanities/Fine Arts/World Language/Science/ Mathematics or Social Science Elective	3-4
	Total credits:	**62-66**