Technical and Vocational Programs

A 25 59 0 SA Information Technology: Systems Administration and Support – Associate in Applied Science

C 25 59 0 SA Computer Upgrade and Repair Technician Certificate

CONCENTRATION OVERVIEW

The Information Technology: Systems Administration and Support curriculum prepares graduates for employment opportunities in electronics technology, computer service, computer networks, systems administration and server maintenance.
Students will gain knowledge and skills to install, service and maintain computers, peripherals, networks and computer- controlled equipment.
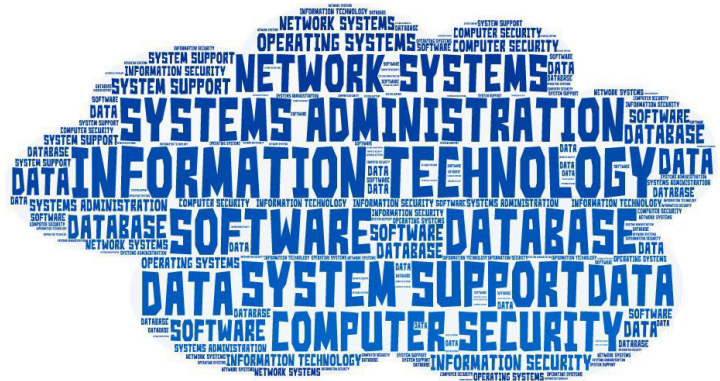Upon completion, students will be able to solve technical issues related to information support and services, interactive media, network systems, information security and other emerging technologies.

Upon completion of this concentration, graduates should qualify for employment in entry-level positions with businesses,educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

Student Learning Outcomes – Upon completion of the program, students will:

1. Demonstrate the ability to analyze the needs of a system administration or database project and identify, install, and configure appropriate hardware and/or software to implement the project.
2. Communicate concentration-related material effectively, both written and oral, with a range of audiences
3. Identify methods to evaluate digital content for validity and usefulness.

Partnership: N/A

A 25 59 0 SA Information Technology: Systems Administration and Support – A.A.S.

First Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
ENG 111 Writing and Inquiry	Pre-Requisites: ENG 002 Tier 1 Co-Requisites: ENG 011	3			3	3
CIS 111 Basic PC Literacy OR CIS 110 Introduction to Computers	Pre-Requisites for CIS 110: ENG 002 Tier 1 and MAT 003 Tier 1 Pre-Requisites for CIS 111: none	1-2	2		3-4	2-3
WBL 110 World of Work	Pre-Requisites: none	1			1	1
CTI 110 Web, Pgm, & DB Foundation	Pre-Requisites: none	2	2		4	3
CTS 115 Info Sys Business Concept	Pre-Requisites: ENG 002 Tier 1	3			3	3
CIS 115 Intro to Programming and Logic	Pre-Requisites: MAT 003 Tier 1	2	3		5	3
TOTAL SEMESTER HOURS						**15-16**

First Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
ENG 112 Writing/Research in Disciplines	Pre-Requisites: ENG 111	3			3	3
MAT 143 Quantitative Literacy OR MAT 152 Statistical Methods I OR MAT 171 Pre-calculus Algebra	Pre-Requisites for MAT 143: MAT 003 Tier 1 and ENG 002 Tier 1 Co-Requisites for MAT 143: MAT 043 Pre-Requisites for MAT 152: MAT 003 Tier 2 and ENG 002 Tier 1 Pre-Requisites for MAT 171: MAT 003 Tier 2 or MAT 143 or MAT 152 Co-Requisites for MAT 171: MAT 071	2-3	2		4-5	3-4
CTS 240 Project Management	Pre-Requisites: ENG 002 Tier 1, and CIS 110 or CIS 111	2	2		4	3
CTI 120 Network & Sec Foundation	Pre-Requisites: CIS 110 or CIS 111	2	2		4	3
NOS 110 Operating Systems Concepts	Pre-Requisites: CIS 110 or CIS 111	2	3		5	3
TOTAL SEMESTER HOURS						**15-16**

A 25 59 0 SA Information Technology: Systems Administration and Support A.A.S.

Seond Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
CTS 120 Hardware/Software Support	Co-Requisites for CTS 120: CIS 110 or CIS 111	2	3		5	3
CTS 285 Systems Analysis & Design	Pre-Requisites: CIS 115 Co-Requisites: DBA 110	3			3	3
DBA 110 Database Concepts	Pre-Requisites: CIS 110 or CIS 111	2	3		5	3
NET 110 Networking Concepts	Pre-Requisites: CIS 110 or CIS 111	2	2		4	3
ART 111 Art Appreciation OR MUS 110 Music Appreciation OR PHI 240 Introduction to Ethics	Pre-Requisites for ART 111 or MUS 110: none Pre-Requisites for PHI 240: ENG 111	3			3	3
PSY 150 General Psychology OR SOC 210 Introduction to Sociology OR ECO 251 Prin. of Microeconomics	Pre-Requisites for PSY 150: ENG 002 Tier 1 Pre-Requisites for SOC 210: ENG 002 Tier 1 Pre-Requisites for ECO 251: ENG 002 Tier 1 and MAT 003 Tier 1	3			3	3
TOTAL SEMESTER HOURS						**18**

Second Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
NOS 230 Windows Admin I	Pre-Requisites: NOS 110	2	2		4	3
NET 126 Switching and Routing	Pre-Requisites for NET 126: NET 110	1	4		5	3
DBA 120 Database Programming OR EGR 131 Intro to Electronics Technology WBL 111, WBL 112, WBL 121, WBL 122, WBL 131, WBL 132, Work-Based Learning	Pre-Requisite for DBA 120: DBA 110 Pre-requisites for WBL: None Pre-requisites for EGR131: None	2	2		4	1-3
CTS 220 Adv Hardware/Software Support	Pre-Requisites: CTS 120	2	3		5	3
CTS 289 System Support Project	Pre-Requisites: CTI 110, CTI 120, CTS 115, CTS 240 and CTS 285	1	4		5	3
NOS 120 Linux/Unix Single User	Pre-Requisites for NOS 120: CTS 220, CTI 130, or NOS 110	2	2		4	3
TOTAL SEMESTER HOURS						16-18
TOTAL SEMESTER HOURS REQUIRED FOR ASSOCIATE DEGREE						64-68