New Program Report

Date Submitted:
04/19/2023

Institution
Three Rivers College

Site Information

Implementation Date:
7/1/2023 12:00:00 AM

Added Site(s):

Selected Site(s):

Three Rivers College, Three Rivers Boulevard, Poplar Bluff, MO, 63901

TRC @ Dexter, 515 West Market, Dexter, MO, 63841

TRC @ Kennett, 1002 Great West Drive, Kennett, MO, 63857

TRC @ Sikeston, 1400 S. Main Street, Sikeston, MO, 63801

CIP Information

CIP Code:
110901

CIP Description:
A program that focuses on the design, implementation, and management of linked systems of computers, peripherals, and associated software to maximize efficiency and productivity, and that prepares individuals to function as network specialists and managers at various levels. Includes instruction in operating systems and applications; systems design and analysis; networking theory and solutions; types of networks; network management and control; network and flow optimization; security; configuring; and troubleshooting.

CIP Program Title:
Computer Systems Networking and Telecommunications

Institution Program Title:
Cybersecurity

Degree Level/Type

Degree Level:
Associate Degree

Degree Type:
Associate in Applied Science

Options Added:

Collaborative Program:
N

Mode of Delivery

Current Mode of Delivery

Classroom

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Student Preparation

Special Admissions Procedure or Student Qualifications required:
None

Specific Population Characteristics to be served:
n/a

Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate:
A bachelor's degree in computer science or related field is required. A CompTIA Security + or equivalent certification is also required.

Estimate Percentage of Credit Hours that will be assigned to full time faculty:
60 percent of credit hours assigned to full-time faculty.

Expectations for professional activities, special student contact, teaching/learning innovation:
Students will be prepared to take the CompTIA Security + certification test.

Student Enrollment Projections Year One-Five

Year 1	**Full Time:** 10	**Part Time:** 0	
Year 2	**Full Time:** 10	**Part Time:** 2	
Year 3	**Full Time:** 12	**Part Time:** 2	**Number of Graduates:** 14
Year 4	**Full Time:** 14	**Part Time:** 3	
Year 1	**Full Time:** 10	**Part Time:** 0	
Year 2	**Full Time:** 10	**Part Time:** 2	
Year 3	**Full Time:** 12	**Part Time:** 2	**Number of Graduates:** 14
Year 4	**Full Time:** 14	**Part Time:** 3	
Year 1	**Full Time:** 10	**Part Time:** 0	
Year 2	**Full Time:** 10	**Part Time:** 2	
Year 3	**Full Time:** 12	**Part Time:** 2	**Number of Graduates:** 14
Year 4	**Full Time:** 14	**Part Time:** 3	
Year 1	**Full Time:** 10	**Part Time:** 0	
Year 2	**Full Time:** 10	**Part Time:** 2	
Year 3	**Full Time:** 12	**Part Time:** 2	**Number of Graduates:** 14

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Year 4	**Full Time:** 14	**Part Time:** 3	
Year 5	**Full Time:** 15	**Part Time:** 3	**Number of Graduates:** 18

Percentage Statement:
40.00

Program Accreditation

Institutional Plans for Accreditation:
Three Rivers College will be seeking a designation with the National Centers of Academic Excellence in Cybersecurity (NCAE-C). The plan is to have the designation prior to July of 2025.

Program Structure

Total Credits:
60

Residency Requirements:
n/a

General Education Total Credits:
15

Major Requirements Total Credits:
60

Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
MATH 161 or MATH 163	3	Mathematical Reasoning & Modeling or College Algebra or higher
CYS 225	3	Information Security Management
CYS 215	3	Computer Forensics
PHYS 100	3	Survey of Physics
CYS 226	3	Ethical Hacking
IST 100	3	Computer Applications
MST 115	3	IT Essentials
GOVT 121	3	National and State Government
MST 128	3	Networking II
CYS 115	3	Introduction to Cybersecurity
CYS 257	3	Historic Perspectives in Cybersecurity
MST 118	3	Networking I
ENGL 111	3	College Writing
ADJU 102	3	Introduction to Criminal Justice
MST 218	3	Server Administration I

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MST 227	3	Introduction to Programming
CYS 116	3	Ethics in Information Technology
SCOM 110	3	Public Speaking
MST 219	3	Server Administration II
ADJU 113	3	Criminal Law

Free Elective Credits:
0

Internship or other Capstone Experience:
No requirements.

Assurances

I certify that the program is clearly within the institution's CBHE-approved mission. The proposed new program must be consistent with the institutional mission, as well as the principal planning priorities of the public institution, as set forth in the public institution's approved plan or plan update.

I certify that the program will be offered within the proposing institution's main campus or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program of another Missouri institution in accordance with 6 CSR 10-4.010, subsection (9)(C) Submission of Academic Information, Data and New Programs.

I certify that the program will build upon existing programs and faculty expertise.

I certify that the program can be launched with minimal expense and falls within the institution's current operating budget.

I certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful. Institutions' decision to implement a program shall be based upon demand and/or need for the program in terms of meeting present and future needs of the locale, state, and nation based upon societal needs, and/or student needs.

Contact Information

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Cybersecurity (AAS)

Department of Career Studies and Workforce Development
Degree Type: Associate of Applied Science
Contact: Dr. Michael Malone   mmalone@trcc.edu
Purpose: Career and Technical Education. The Cybersecurity degree program prepares students for entry-level positions in the cybersecurity field. Cybersecurity specialists work with both information Technology departments and law enforcement to detect, mitigate, and prevent attacks against information systems.

FIRST YEAR

Fall Semester

			Hours	
ENGL	111	College Writing	3	
IST	100	Computer Applications	3	
MATH MATH	161 163	Mathematical Reasoning & Modeling - or - College Algebra for Calculus or higher	3	
MST	115	IT Essentials	3	
MST	118	Networking I	3	
		TOTAL HOURS	**15**	

Spring Semester

			Hours	
ADJU	102	Introduction to Criminal Justice	3	
CYS	115	Introduction to Cybersecurity	3	
CYS	116	Ethics in Information Technology	3	
MST	128	Networking II	3	
MST	218	Server Administration I	3	
		TOTAL HOURS	**15**	

SECOND YEAR

Fall Semester

			Hours	
MST	219	Server Administration II	3	
MST	227	Introduction to Programming	3	
GOVT	121	National and State Government	3	
SCOM	110	Public Speaking	3	
PHYS	100	Survey of Physics	3	
		TOTAL HOURS	**15**	

Spring Semester

			Hours	
ADJU	113	Criminal Law	3	
CYS	215	Computer Forensics	3	
CYS	225	Information Security Management	3	
CYS	226	Ethical Hacking	3	
CYS	257	Historic Perspectives in Cybersecurity	3	
		TOTAL HOURS	**15**	

Please see individual course descriptions for prerequisites, corequisites, and/or other requirements.

A list of general education courses can be found on the Core Curriculum Transfer (CORE42) General Education Courses page.

Program Outcomes

- Demonstrate an understanding of basic computer hardware and software in both standalone and networked environments.
- Explain the fundamental components, concepts, and application of cybersecurity principles.
- Identify risks, assess threats, and develop effective countermeasures aimed at protecting computer assets and data.
- Demonstrate the ability to detect and track cyber intrusions.
- Demonstrate an understanding of the ethical and legal implication technology and cybersecurity.