



Syracuse City School District Computer Forensics Program Reapproval Self-Study Report

Career and Technical Education

March 2023

Computer Forensics Program Reapproval Self-Study Report

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The Self-Study Process

The self-study is an important step in the career and technical education approval process and provides for an in-depth evaluation of the program of study. Its purpose is to bring together primarily internal stakeholders to review the CTE program and propose relevant modifications.

[NYSED Self-Study Process](#)

Program Information

Computer Forensics is the application of investigation and analysis techniques to gather and preserve evidence from computing devices in a way that is suitable for presentation in a court of law. The program is designed to help students on a pathway to careers in local and state police and law enforcement, government agencies, and private corporations.

Students will build on skills in information processing, networks, hardware, software applications to explore the processes of securing computers and computer networks, and conducting investigations of cybercrimes and forensic analysis of digital devices.

Students will be equipped with the knowledge and skills to manage helpdesk functions and small to medium business IT operations as well as continue on to post-secondary training for careers in computer and network security, cybercrime investigation and computer forensics.

Throughout the program, students gain mastery of these skills by performing simulated hands-on exercises. Students who successfully complete the program will earn up to nine college credits and obtain CompTIA A+ Certification, a fundamental accreditation for work in many IT fields.

[NYSED CTE Program Requirements](#)

Computer Forensics

PSLA at Fowler CTE Pathway

The Career Field: Computer forensics experts are specially trained professionals who work with law enforcement agencies and private companies, to retrieve information from computers and other devices.

Professionals in this field are in high demand. The job outlook is excellent, projected to grow 21 percent from 2014 to 2024, much faster than the average. Growth in cloud computing, cyber security, and mobile networks will increase demand for these workers.



The Program: From auction fraud to social engineering, from email scams to phishing — In Computer Forensics at the Public Service Leadership Academy at Fowler, you'll learn techniques to search for, preserve, and analyze information on computer systems to find potential evidence for a trial.

Courses will involve in-depth coverage of:

- › Computer crime laws
- › Collection and management of evidence
- › Analyzing computers that might contain crime-related information
- › Preparing computer evidence for courtroom testimony



Curriculum

- Level 100 – Level 400
 - Integrated credit in ELA
 - Embedded Career and Financial Management
- NYSED Curriculum Requirements
- NYSED Overview of Integrated and Specialized Academic Credits
- NYSED Career and Financial Management Framework



Program Data

Computer Forensics Program Data			
Coursework	Technical Assessment		Technical Endorsement
How many students have completed the coursework for this program of study since it was last approved or re-approved? Please indicate totals by program year.	Of the total number of students who have completed the coursework, how many students completed the technical assessment used in this program?	Of the total number of students who have completed the technical assessment, how many passed?	How many students received a technical endorsement?
2018-2019 2	2018-2019 2	2018-2019 2	2018-2019 2
2019-2020 7	2019-2020 7	2019-2020 2	2019-2020 2
2020-2021 7	2020-2021 7	2020-2021 3	2020-2021 3
2021-2022 9	2021-2022 8	2021-2022 6	2021-2022 6
Cumulative Total 25	Cumulative Total 24	Cumulative Total 13	Cumulative Total 13
Of the total number of students who have completed the coursework for this program of study, how many had IEPs?	Of the total number of students who have completed the coursework and completed the technical assessment, how many had IEPs?	Of the total number of students with IEPs who completed the technical assessment, how many passed?	Of those students who received the technical endorsement, how many had IEPs?
2018-2019 0	2018-2019 n/a	2018-2019 n/a	2018-2019 n/a
2019-2020 1	2019-2020 n/a	2019-2020 n/a	2019-2020 n/a
2020-2021 1	2020-2021 n/a	2020-2021 n/a	2020-2021 n/a
2021-2022 2	2021-2022 2	2021-2022 2	2021-2022 2
Cumulative Total 4	Cumulative Total 2	Cumulative Total 2	Cumulative Total 2
Of the total number of students who have completed the coursework for this program of study, how many had Section 504 plans?	Of the total number of students who have completed the coursework and completed the technical assessment, how many had Section 504 plans?	Of the total number of students with Section 504 plans who completed the technical assessment, how many passed?	Of those students who received the technical endorsement, how many had section 504 plans?
2018-2019 n/a	2018-2019 n/a	2018-2019 n/a	2018-2019 n/a
2019-2020 n/a	2019-2020 n/a	2019-2020 n/a	2019-2020 n/a
2020-2021 n/a	2020-2021 n/a	2020-2021 n/a	2020-2021 n/a
2021-2022 1	2021-2022 1	2021-2022 1	2021-2022 1
Cumulative Total 1	Cumulative Total 1	Cumulative Total 1	Cumulative Total 1



Career Outlook



U.S. BUREAU OF LABOR STATISTICS

Quick Facts: Information Security Analysts	
2021 Median Pay 	\$102,600 per year \$49.33 per hour
Typical Entry-Level Education 	Bachelor's degree
Work Experience in a Related Occupation 	Less than 5 years
On-the-job Training 	None
Number of Jobs, 2021 	163,000
Job Outlook, 2021-31 	35% (Much faster than average)
Employment Change, 2021-31 	56,500

[Computer Forensics Occupational Employment Statistics State Data](#)

[Computer Forensics Occupational Employment Statistics Local Data](#)



Certifications

Computer Forensics Teacher: Matthew Bates

Search Results						
Select	First Name	Last Name	MI	City	State	Registration Status
<input checked="" type="radio"/>	RHIANNON	WHITE	M	LIVERPOOL	NY	Expired
<input type="radio"/>	RHIANNON	WHITE	M	FAIRPORT	NY	Registered Inactive

[View Detail](#)

Certificate Information for New York State Teaching Certificate Holder			
Certificate Title	Issue / Effective Date	Expiration Date	Status
English 7-12 Permanent Certificate	02/01/2007		Issued
English 7-12 Provisional Certificate	02/01/2002	01/31/2007	Expired

Certified by the State of New York solely for purposes of employment by the City School District of the City of New York and the operation of the School District.

Search Results

Select	First Name	Last Name	MI	City	State	Registration Status
<input checked="" type="radio"/>	MATTHEW	CARON	C	MARCELLUS	NY	Registered Active

[View Detail](#)

Certificate Information for New York State Teaching Certificate Holder

Certificate Title	Issue / Effective Date	Expiration Date	Status
Special Education Permanent Certificate	02/01/2002		Issued
Coordinator of Work-Based Learning Programs for Career Awareness Extension Permanent Extension	11/28/2018		Issued
Special Education Provisional Certificate	02/01/2001	01/31/2006	Expired

Certified by the State of New York solely for purposes of employment by the City School District of the City of New York and the operation of the School District.

Search Results

Select	First Name	Last Name	MI	City	State	Registration Status
<input checked="" type="radio"/>	NICHOLAS	LISI		SYRACUSE	NY	Registered Active

[View Detail](#)

Certificate Information for New York State Teaching Certificate Holder

Certificate Title	Issue / Effective Date	Expiration Date	Status
Media Communications 7-12 Initial Certificate	09/01/2011	08/31/2016	Expired
Coordinator of Work-Based Learning Programs for Career Development Extension Initial Extension Annotation	12/19/2013	08/31/2016	Expired
Media Communications 7-12 Professional Certificate	03/17/2016		Issued
Coordinator of Work-Based Learning Programs for Career Development Extension Professional Ext/Anno	03/17/2016		Issued

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Technical Assessment

Precision Exam:
Computer Systems I #884

SCSD Career Portfolio

Career Portfolio Rubric

NYSED Technical Assessment
Requirements

NYSED Technical Endorsement
Requirements

Computer Systems I

EXAM INFORMATION	DESCRIPTION												
Exam Number 884	Students will learn necessary competencies for an entry-level IT professional including installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, diagnosing, and performing preventive maintenance of basic personal computer hardware.												
Items 27													
Points 32	EXAM BLUEPRINT												
Prerequisites SUGGESTED INFORMATION TECHNOLOGY, INTRO OR TEACHER APPROVAL													
Recommended Course Length ONE SEMESTER	<table border="1"><thead><tr><th>STANDARD</th><th>PERCENTAGE OF EXAM</th></tr></thead><tbody><tr><td>1- Mobile Devices</td><td>13%</td></tr><tr><td>2- Networking</td><td>19%</td></tr><tr><td>3- Hardware</td><td>41%</td></tr><tr><td>4- Hardware and Network Troubleshooting</td><td>22%</td></tr><tr><td>5- Operational Procedures</td><td>6%</td></tr></tbody></table>	STANDARD	PERCENTAGE OF EXAM	1- Mobile Devices	13%	2- Networking	19%	3- Hardware	41%	4- Hardware and Network Troubleshooting	22%	5- Operational Procedures	6%
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3- Hardware	41%												
4- Hardware and Network Troubleshooting	22%												
5- Operational Procedures	6%												
National Career Cluster INFORMATION TECHNOLOGY Performance Standards INCLUDED (OPTIONAL)													
Certificate Available Yes													

Work-based Learning

SCSD Work-based Learning

Students will be connected with working computer science professionals in the community through Career Coaching, field trips and job shadowing which could lead to further opportunities for direct job training and real-world experience. Students will create and maintain a portfolio of their work-based learning experiences throughout the program to document the development of their skills.

Syracuse City Schools Work-based Learning Handbook

NYSED Work-based Learning Requirements



Employability Profiles

Employability Profiles:

- Industry Based Skill Standards
- Career Development Standards

NYSED Employability Profile Requirements

Advisory Council Members

- Professor Robert Price and Andrew Carr, Utica College
- Jay Williams, Director of Cyber Security, Parsons Corporation
- Andrew Cramer, SCSD, Mgr. of Operations & Programming
- Jim Shea, Cyber Defense Institute
- Roger Benn, IT Director, Excellus
- Justin Storms, Onondaga County Center for Forensic Science, Digital Evidence
- Joe Behan, VP of Human Resources and Development, Rapid Response Monitoring
- Patrick Danial, Co-Founder and Chief Technology Officer, Terakeet
- Ethan Tancredi, Director of Syracuse Region, ICS
- Jennifer Cross, ICS
- Ryan O'Donnell Security Consultant, CHIMERA INTEGRATIONS



Post-Secondary Articulation Agreement

Our Computer Forensics program has articulation agreements with Onondaga Community College and Mohawk Valley Community College

MOHAWK VALLEY COMMUNITY COLLEGE
UTICA-ROME, NY 13501
AND
SYRACUSE CITY SCHOOL DISTRICT
725 HARRISON STREET, SYRACUSE NY 13210

ARTICULATION AGREEMENT

The purpose of this articulation agreement is to develop an ongoing relationship between Mohawk Valley Community College (MVCC) and Syracuse City School District (SCSD), enabling each of these institutions to better serve their common students. The relevant faculties of MVCC and SCSD subscribe to the following memorandum of understanding based on their mutual concern for providing applied programs that will build upon past student experiences and eliminate unnecessary duplication of instruction.

It is agreed, subject to the following conditions, that MVCC will grant 3 college credit hours for CI104-Introduction to Cybersecurity for all students who complete SCSD's Computer Forensics CTE program *(Note: This agreement is valid for up to 1 year per SCSD guidelines)*.

To receive college credit for CI104, SCSD Computer Forensics CTE graduates must meet the following criteria:

1. Achieved a minimum cumulative average of 85 during their SCSD secondary school experience.
2. Completed the SCSD Computer Forensics CTE pathway.

Process for granting credit owed:

1. Students will arrange a meeting with the Assistant Vice President (AVP), Academic Affairs or designee by calling 315-792-5446 upon entrance into MVCC. At the meeting, students will provide documentation supporting their attainment of the above criteria #1-2.
2. The AVP or designee will verify that the student meets criteria #1-2 identified above.
3. Upon verification of the student's fulfillment of criteria #1-2, the AVP or designee will communicate with MVCC's Registrar to authorize the granting of transfer credit for CI104.

This agreement is effective for 5-years subsequent the completion of the signing process unless either party has significant changes in the program. SCSD may terminate the Agreement upon thirty (30) days written notice to the College. The College reserves the right to make final determination concerning all college credit awarded.

This Agreement incorporates all provisions of the Data Privacy Plan and Parents' Bill Of Rights For Data Security And Privacy executed by MVCC.

<p>Syracuse City School District</p> <p><u>M. B...</u> <u>4/25/23</u> Computer Forensics Instructor Date</p> <p><u>B. O...</u> <u>3/11/22</u> Director of Career Technical Education Date</p> <p><u>J. A...</u> <u>2/12/22</u> Superintendent Date</p>	<p>Mohawk Valley Community College</p> <p><u>[Signature]</u> <u>3/15/22</u> Dept. School of STSN-Transfer Date</p> <p><u>[Signature]</u> <u>8/28/22</u> V.P. for Learning & Academic Affairs Date</p> <p><u>[Signature]</u> <u>3/21/22</u> President Date</p>
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Mohawk Valley Community College does not discriminate on the basis of age, race, creed, color, sex, sexual orientation, national origin, disability, marital status, gender identity, pregnancy, religion, practicing status, characteristics, marital status or domestic violence victim status or submission, employment, and treatment of students and employees in any aspect of the business of the College.

Articulation Agreement
between
Syracuse City School District (SCSD)
725 Harrison St, Syracuse, NY
and
Onondaga Community College
4585 West Seneca Turnpike, Syracuse, NY

The signatories of this articulation agreement, Syracuse City School District (SCSD) and Onondaga Community College (OCC), declare their intention to participate in a partnership for the purpose of delivering educational instruction to eligible students. The parties to this agreement have reached the following understanding:

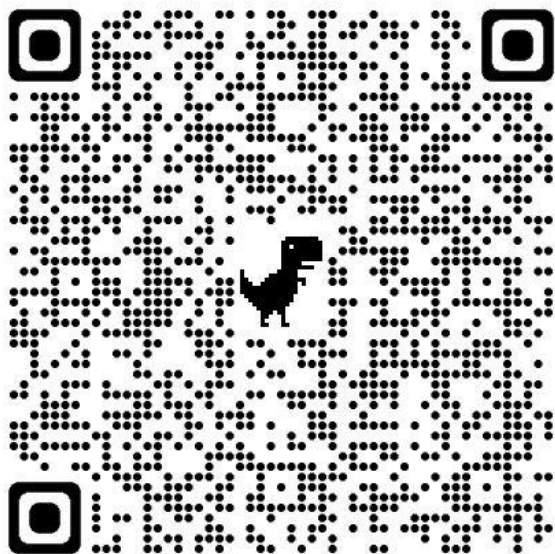
1. **Term**
The term of this agreement shall be for five years from July 1, 2023 – June 30, 2028 and subject to the following conditions:
 - Both parties have the option to extend this Agreement for one (1) additional five-year period giving written notice to the College no later than ninety (90) days prior to the expiration date.
2. **Modification and Waiver**
No waiver or modifications shall be valid unless it is in writing and signed by OCC and SCSD.
3. **Curriculum and Courses**
 - Students who have enrolled in the Computer Forensics program at Syracuse City School District will be eligible to enroll in College Credit Now and earn credit for:
 - ENG 103 and ENG 104: Freshman Composition and Literature I and II, subject to an annual Memorandum of Understanding and the identification of an OCC faculty member to teach the course on-premises at the Public Service Leadership Academy; and
 - CFS 140, Computer Forensics & Security, subject to an annual Memorandum of Understanding and the availability of a credentialed high school instructor or the identification of an OCC faculty member to teach the course on-premises at the Public Service Leadership Academy at Fowler High School.
 - The above course offered through the OCC College Credit Now Program is required for the Cybersecurity, A.S. degree at OCC.
 - Tuition for concurrent enrollment courses will be incurred according to all applicable requirements in place by the State University of New York. For courses taught by Onondaga Community College faculty, the Syracuse City School District will additionally incur the cost set by annual Memorandum of Understanding between SCSD and OCC.
 - Students will be assisted in the course registration process by OCC. Students will also be supported in the admission process to Onondaga Community College through a specialized workshop and the Office of Student Recruitment.

NYSED Post-Secondary Articulation Agreement Requirements



Thank you!!!

It is important to provide your thoughts in the Self Study report. Please access the QR code or click on the graphic below to record your comments. We will also email you the link.



“Tell us what you think!”



We appreciate your time and support of our programs and look forward to your feedback.

