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

Syracuse City School District

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

NYSED Program Data Requirements

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**
⦿	RHIANNON	WHITE	M	LIVERPOOL	NY	Expired
○	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.

NYSED Program Faculty Requirements

Search Results

Select	First Name	Last Name	MI	City	State	Registration Status
●	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

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Search Results

Select	First Name	Last Name	MI	City	State	Registration Status
●	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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NYSED Program Faculty Requirements

Technical Assessment

Precision Exam:
Computer Systems I #884

SCSD Career Portfolio

Career Portfolio Rubric

NYSED Technical Assessment Requirements

NYSED Technical Endorsement Requirements

PRECISION EXAMS
by youscience

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	
National Career Cluster INFORMATION TECHNOLOGY	
Performance Standards INCLUDED (OPTIONAL)	
Certificate Available YES	

STANDARD	PERCENTAGE OF EXAM
1- Mobile Devices	13%
2- Networking	19%
3- Hardware	41%
4- Hardware and Network Troubleshooting	22%
5- Operational Procedures	6%

www.youscience.com

Computer Systems 1
884.2021

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

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.
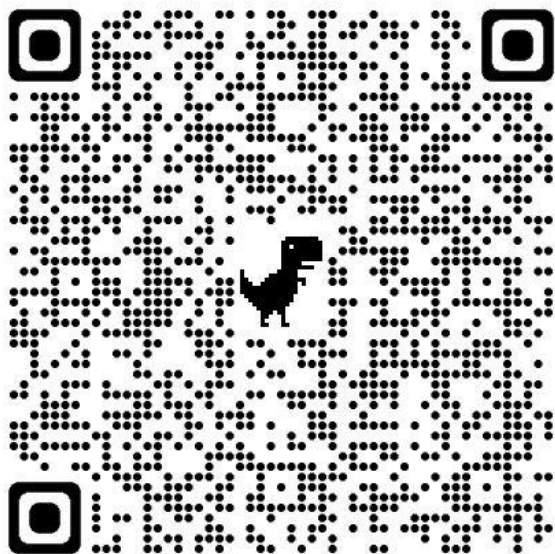
"Tell us what you think!"

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