

NYC Software Engineering Programs: CTE Articulation Agreement Proposal

April 24, 2015

Agenda

- Debbie Marcus, DOE
 - Computer Science in NYC Schools
 - What is CTE?
- Don Miller and Raquel Cardona, DOE
 - SEP Program in NYC
- Leigh Ann DeLyser, CSNYC
 - What is an articulation agreement?
 - AFSE Proposal

CS Education in NYC

- Two new software engineering schools, Academy for Software Engineering (AFSE) and Bronx Academy for Software Engineering (BASE)
- Software Engineering Pilot (SEP), 3 and 4 year curriculum in computer science in 9 middle and 9 high schools respectively
- Six new 9-14 schools, e.g., Pathways in Technology Early College High School (P-Tech), partnership among DOE, CUNY, and industry partners, including IBM
- Goals for expansion

What is the CTE Program Approval Process?

The Career and Technical Education (CTE) Program Approval Process is the mechanism by which New York State evaluates CTE programs to ensure high quality in a range of important areas, including academic rigor, relevance to industry, and articulation to “next-step” educational and career options.

Core Premises for High Quality CTE

Quality CTE programs should achieve three outcomes to achieve program approval:

1. Articulate to a postsecondary educational or training path leading to a two- or four-year degree or other credential;
2. Through instruction leading to industry-recognized credentialing, work-based learning experiences and opportunities for workplace acculturation, position completers for related career-track lower-level work while pursuing further education/training opportunities; and
3. Provide greater understanding of, and exposure to, future career options.



SEP

<http://www.sepnyc.org>

Software Engineering Pilot
NEW YORK CITY DEPARTMENT OF EDUCATION

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New SEP Curriculum This Spring

Posted on [February 24, 2015](#) by [SEPNYC](#)

Beginning in April, 7th and 10th grade SEP students will be learning the ins and outs of TouchDevelop, Microsoft's visual programming language used to design mobile apps. Tenth graders will spend roughly 4 weeks learning the ropes of TouchDevelop, while 7th grade students [Continue reading](#) →

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SEP High School Curriculum

Computer
Programmin
g

Scratch
Python

Computer
Programmin
g

Processing

Web
Development

HTML / CSS
JavaScript

Web
Development

HTML / CSS / JS
Networks / Backend

Physical
Computing

Arduino
Lilypad

Data Science

Spreadsheets /
Tables /
Databases

Mobile
Computing

TouchDevelop

Schools on CTE Track Requiring Articulation Agreements

School Name	Borough	Address	Year Agreement is needed
Academy for Software Engineering (AFSE)	Manhattan	40 Irving Place, New York, NY 10003	2015
Bronx Academy for Software Engineering (BASE)	Bronx	2474 Crotona Ave, Bronx, NY 10458	2016
HS of Telecommunication Arts and Technology (SEP program)	Brooklyn	350 67th St, Brooklyn, NY 11220	2016
UA Gateway (SEP program)	Manhattan	439 W 49th St, New York, NY 10019	2016
Cambria Heights Academy (SEP program)	Queens	188-4 91st Ave, Hollis, NY 11423	2016
New Dorp High School (SEP program)	Staten Island	465 New Dorp Ln, Staten Island, NY 10306	2016
Ralph McKee High School (SEP program)	Staten Island	290 St Marks Pl, Staten Island, NY 1030	2016

Some Basic Parameters

Articulation Agreements are NOT:

- Dual Enrollment - students only earn the credit if they attend YOUR institution.
- An automatic agreement of acceptance - students still need to go through the regular application process.

Some Basic Parameters

Articulation Agreements ARE:

- Enrollment Boosters - agreements can signal to students where they will be welcome and get the most for their time.
- Pipeline Creators - The Software Engineering programs have the diversity post-secondary schools crave.

Proposed Articulation Agreement

The proposed agreement has two parts:

- Academic credit for comparable coursework.
- Assistance finding appropriate work for students with a work history.

Academic Credit for Relevant Coursework

AFSE Name of Course	SEP Courses	QC Equivalent Course	QC Credits
Introduction to Computer Science	Software Engineering (9th)	CSCI 12. Introduction to Computers and Computation	3
Computer Science Principles	Software Engineering Principles (11th)	CSCI 90. Topics in Computing	3
AP Computer Science A	AP Computer Science A	CSCI 111. Introduction to Algorithmic Problem-Solving	3

Finding Appropriate Work

NYC DOE CTE programs report a large number of CTE graduates who attend college often end up working in positions unrelated to their CTE training (Cafeteria Staff or Retail). This provision is to help students make the transition from Work Based Learning and internships supported by the CTE programs, and positions near their college or university.

We propose that students have an appointment scheduled with the appropriate office (Co-op, Career Services, Internship, Student Employment) during the freshman orientation to connect with areas where students can find job postings, get resume and cover letter assistance, and potential career advice.

Questions?

- **Sign-up** to to find out more or to discuss an articulation agreement with your school on our sign-up sheet

Contact us at:

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