

## STEAM-Powered Education for Every Student (PK-12) (NYC ASPDP Version)

### Credits through After School Professional Development Program (ASPDP)

Register with ASPDP to earn P-credits and CTLE hours.

### Total course hours

3 P-credits = 36 coursework hours.

### Spring 2019 semester dates

Start coursework on February 4, 2019 and finish by June 7, 2019.

Register with ASPDP by April 29, 2019.

### Start your online coursework

Go to [quikitech.com/nyc](http://quikitech.com/nyc) and log in to access your course portal.

### Aligned with Next Generation Standards:

- Mathematics Learning Standards (2017) for Mathematical Practice #3: Construct viable arguments and critique the reasoning of others.
- Mathematics Learning Standards (2017) for Mathematical Practice #4: Model with mathematics
- Listening & Speaking Anchor Standards, Comprehension & Collaboration Standard 1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners; express ideas clearly and persuasively, and build on those of others.

**Course Description:** Learn to apply STEAM-powered (science, technology, engineering, arts, and math) instructional practices to your classroom with concrete strategies, tools, and learnings. This course provides teachers the research-based principles and practices for effective STEAM instruction for every student's benefit, in academia, self-image, and in future careers. Students are naturally scientists, technologists, engineers, artists, and yes, even mathematicians! We can teach in such a way as to promote mastery of Next Generation Learning Standards, while fostering critical mindsets for success, including curiosity, inquiry, hands-on learning, creativity, experimentation, critical thinking, and perseverance, to support students' progress in all subjects, propelled by STEAM-related learning and growth.



**Course Outline:** This course consists of 8 sessions.

**Session 1:** Course Introduction

**Session 2:** Overview with Statistics and Research

**Session 3:** Providing "3-Dimensional" Learning

**Session 4:** The Importance of Context

**Session 5:** Planning and Providing Academic Discourse Opportunities

**Session 6:** Student Thinking and Reflection

**Session 7:** Ways (and Reason) to Integrate Arts into Instruction and Learning

**Session 8:** Final Portfolio (multimedia presentation or paper)