

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.

Summer 2019 semester dates

Start coursework on June 17, 2019 and finish by September 6, 2019. Register with ASPDP by August 12, 2019.

Start your online coursework

Go to <u>quikitech.com/nyc</u> 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)