



MONTCLAIR KIMBERLEY ACADEMY

STEM+ Explorers Summer Teacher: Computational Thinking

Position Type: Part-Time, 1–4 week position

Program Dates: July 6 – July 31, 2026

Orientation: June 18, 2026 (9 AM – 3 PM)

Location: Inquiry & Innovation Center, MKA Upper School Campus, Montclair, NJ

Position Summary

Montclair Kimberley Academy (MKA), an innovative PK – 12 independent day school with a strong national reputation, seeks innovative and enthusiastic teachers to design and deliver engaging summer programming for middle school students. The STEM+ Explorers Summer Program offers an inspirational enrichment experience — not summer school or academic acceleration — where students deepen curiosity and creativity through hands-on learning.

This role focuses on teaching the Computational Thinking strand, guiding students through algorithmic problem-solving, programming, data analysis, and physical computing. Students will learn to express problems in ways that a computer can execute, building skills in coding, robotics, and computational design.

Strand Overview: Computational Thinking

- Week 1: Statistics, Data Collection, Analysis & Visualization — Students analyze data related to rising seas, write programs to automate analysis, and generate visualizations to communicate findings.
- Week 2: Storyboarding & Digital Storytelling — Explore the parallels between programming sequence and story structure, creating data-driven digital narratives.
- Week 3: Physical Computing (MaKey MaKey / Raspberry Pi) — Develop programs that control physical devices, connecting coding to real-world innovations.



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- Week 4: Robotics (Dash / LEGO / micro:bit) — Program and design robots to perform tasks and tackle engineering challenges, including simulations of human colonization of Mars.
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Responsibilities

- Design the Computational Thinking curriculum in collaboration with STEM+ Directors during the school year.
 - Create and submit a supply and technology needs list (within budget) to the Director of Summer Operations by May 1, 2026.
 - Attend pre-program orientation on June 18, 2026.
 - Teach the summer schedule:
 - *Morning Lab*: 9 AM–9:45 AM
 - *Computational Thinking Classes* (2 sections): 10:50 AM–12:25 PM
 - *Afternoon Challenge Lab*: 1:30–3:30 PM
 - Provide engaging communications to families about daily activities and student progress.
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Requirements

- Availability for full program dates (July 6 – July 31, 2026), including June 18 orientation.
- Participation in planning meetings with STEM+ Directors during the school year.
- Ability to design and deliver coding, computational, and robotics activities for middle school students.
- Strong organizational skills to manage technology, tools, and lab safety.
- Excellent written and verbal communication skills.
- Collaborative mindset and flexibility in a dynamic summer program setting.



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Qualifications

Required

- Bachelor's degree in Computer Science, Engineering, Education, or a related field.
- Prior teaching experience with middle school students (classroom, enrichment, or summer program).
- Experience with coding platforms, data analysis, or robotics tools (e.g., Dash, LEGO, micro:bit, Raspberry Pi).

Preferred

- Advanced degree in STEM, Computer Science, or Education.
 - Experience designing curriculum or project-based learning experiences.
 - Familiarity with physical computing, data visualization, or digital storytelling tools.
 - CPR/First Aid certification.
 - Passion for teaching computational thinking and problem-solving through hands-on, project-based learning.
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Application Process

Interested candidates should submit their application via email.

Applications should include the following:

- cover letter that addresses what interests you about working at Montclair Kimberley Academy
- current curriculum vitae
- brief statement describing your teaching philosophy
- three letters of recommendation, at least one of which discusses qualities that will support your role as a teacher

Applicants should send all requested materials by email to Monica Masterson, Director of Summer Operations: mmasterson@mka.org



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It is MKA's policy to provide equal employment opportunity to all qualified persons regardless of age, race, creed, color, national origin, ancestry, sex, gender identity, sexual orientation, socio-economic background, or disability not related to the requirements for being a successful employee at MKA.