# Coding and Robotics Minicourse

## For P-8 Teachers and Administrators

The New York State Master Teacher Program is offering a series of coding and robotics minicourses for P-8 teachers and administrators.

As educators of the 21st century, we are challenged to coach young learners to step beyond consumption of computer technology to how to create with computer technology.

This 12 hour mini course will eliminate any fears of where to start or not knowing anything about coding! We will start with the basics of how to think like a computer and first solve puzzles that are fun and challenging without a computer in order to recognize how we, as humans, naturally go through the process of computational thinking; observing patterns, trends, and regularities in data (decomposition), identifying the general principles that generate these patterns (abstraction), develop step by step instructions (algorithm), and devise tests for finding and fixing errors (debug).

We will look at how to implement NYSSLS engineering standards through brief design challenges from the Harvard Creative Computing Curriculum. Finally, we will learn and practice the basics of block based coding through Scratch.mit.edu and pull it all together with a fun, hands-on, and creative make and take with Makey-Makey Go. All activities are appropriate and can be easily modified for any grade K-8.

| **When:** | March 3, 5, 10, 12  
5:00 pm - 8:00 pm  
Food and beverages available at 4:30. |
| **Where:** | SUNY Buffalo State |
| **Who:** | This minicourse is open to all P-8 teachers and administrators. |
| **Cost:** | There is no cost to attend this workshop. |
| **CTLE:** | All participants will earn 12 hours of CTLE professional development |

Register at [msmt.buffalostate.edu/professional-development-wny-teachers](msmt.buffalostate.edu/professional-development-wny-teachers)

Questions? Please contact the Master Teacher Program at [MSMT@buffalostate.edu](mailto:MSMT@buffalostate.edu).