

**University of Georgia**

**Robot Math: Enhancing Mathematics through Robotics**

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*Robot Math: Enhancing Mathematics through Robotics* partners STEM educators from Greene County with UGA professors in Education, Mathematics, and Engineering to gain key knowledge and collaboratively develop and implement activities that teach mathematical concepts (e.g., fractions and decimals, angles, coordinate grids) through robotics activity and computer science. Integrated STEM activities are strongly encouraged by Georgia's Department of Education but often difficult to enact in the classroom. Participants will explore math concepts by building and programming robotics to negotiate different challenges. The program will provide teachers with the tools for taking abstract mathematical concepts and teaching their students to apply them in an authentic and tangible way in fields such as science and engineering. Math terminology and concepts will be infused and reified by grade-level teachers in their classes.

This 16-month (Feb 2017 - May 2018) project targets teachers at Union Point STEAM Academy in the high needs LEA, Greene County. Sixteen teachers will participate, including teachers from grades 3 through 7, instructional coaches, school library media specialists, and other key STEM teachers. Professional development will be offered as a 4-day summer workshop (30 hours) with five follow-up meetings and additional in-classroom support (appx 10 additional hours), providing nearly 40 hours of professional development on the use of robotics for teaching math.

**Arts & Sciences Unit of Institute of Higher Education**  
University of Georgia—Mathematics Department

**Unit of Institute of Higher Education that prepares teachers & principals**  
University of Georgia—College of Education

**High Need LEA(s)**  
Greene County