Building Capacity for STEM Schools (BCSS), designed as a new Teacher Quality project, is a collaborative endeavor between the Atlanta Public Schools (APS) and Georgia State University (GSU). The BCSS is focused on building the capacity of high schools as Ready for STEM Certification as defined by Georgia Department of Education. The specific emphasis is: (a) ongoing STEM specific professional learning, (b) implementation in classroom instruction, and (c) teacher collaboration to plan integrated lessons, share/co-create STEM activities, and plan learning outcomes. The BCSS will be implemented in three of APS high schools: Benjamin Mays High School, South Atlanta High School, and Therrell High School. Fifteen teachers will participate in BCSS. Each teacher will be a member of a five teacher team from their respective schools. Each five member team will include: (a) one algebra teacher, (b) one geometry teacher, (c) one biology teacher, (c) one chemistry teacher, and (d) one engineering teacher. The BCSS will begin in May 2016 and end in April 2017. The project will be implemented in four phases that will engage the participants 60 hours of professional learning. The objectives of BCSS are, teachers will: (1) demonstrate mastery of and enhance their content knowledge and pedagogical skills in the design and delivery of integrated STEM lessons using Problem-Based Learning; (2) create integrated STEM lessons using PBL; and (3) implement and assess the teaching of integrated STEM lessons in their classrooms.