

CENTRAL BUCKS SCHOOL DISTRICT
Course of Study
Recommendation for Adoption

Course: STEM 6

Date: 08-06-2026

Student Level: Middle School

Grade Level: Grade 6

Characterization of Course of Study:

STEM 6 is a hands-on, project-based course designed to build upon the technology and engineering concepts introduced in the QUEST Elementary School Program while expanding students' technological literacy, creativity, and problem-solving abilities. Technical design and drawing skills are introduced using drafting tools and CAD, open and closed ended design and engineering challenges are included using prototyping tools such as 3D printers, vinyl cutters and laser engravers. Safety, hand tools and small machines are introduced using the woodshop. Robotics is explored as we teach students to navigate our modern world. Through engaging design challenges and real-world engineering applications, students strengthen their understanding of the engineering design process as they identify problems, develop solutions, construct prototypes, test designs, and refine their work.

Reasons for Proposed Adoption:

STEM 6 is a rebranding of our QUEST Grade 6 course for a middle school format to ensure vertical integration and continuation of elementary school STEM concepts. PA STEELS standards are included and were used to guide the development of STEM 6. This project-based course is designed to strengthen technological literacy while developing the problem-solving, collaboration, and innovation skills necessary for success in an increasingly technological world.

Principal Approval Date: _____

Curriculum Committee Approval Date: _____

School Board Approval Date: _____