

CENTRAL BUCKS SCHOOL DISTRICT

Course of Study Recommendation for Adoption

Course: STEM 7

Date: 08-06-2026

Student Level: Middle School

Grade Level: Grade 7

Characterization of Course of Study:

STEM 7 is a hands-on, project-based course designed to build upon the technology and engineering concepts introduced in STEM 6 while furthering students' technological literacy, creativity, and problem-solving abilities. Expanded opportunities in Technical Design and drawing skills are continued using hand design tools and CAD. Open 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 also expanded using the woodshop. Robotics is explored more in depth 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 7 is an expanded version of our STEM 6 course to ensure vertical integration and continuation of sixth grade STEM concepts. PA STEELS standards are included and were used to guide the development of STEM 7. This project-based course is designed for students to further expand their technological literacy while improving upon their 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: _____