

CENTRAL BUCKS SCHOOL DISTRICT

Course of Study Recommendation for Adoption

Course: STEAM Fabrication 1

Date: 08-06-2026

Student Level: High School

Grade Level: Grade 9,10,11,12

Characterization of Course of Study:

STEAM Fabrication 1 is an 18 Week introductory, project-based course designed to develop students' knowledge and skills in planning and making projects using manual and digital tools and machines. Through hands-on experiences using technical sketching techniques, measuring accurately, CAM, tools and machines, students explore ways to use their hands to build a nice, accurate and highly refined project while developing their problem-solving abilities.

Students engage in the engineering design process to design, build, program, test, and improve design systems that solve authentic challenges. The course emphasizes creativity, innovation, collaboration, and critical thinking while introducing industry-relevant technologies and career pathways in engineering, manufacturing, automation, and computer science.

Reasons for Proposed Adoption:

STEAM Fabrication 1 is a more modern version of our former Materials and Engineering (South and West) and Engineering (East). This course ensures vertical integration and continuation of middle school STEM concepts with a focus on technical sketching, CAM, fine project creation and measuring accurately using a tape measure within the material and engineering world. PA STEELS standards are included and were used to guide the development of STEAM Fabrication 1. 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: _____