Course Title: Cambridge Design & Technology AS Level

Course Prerequisites: Refer to annual registration presentation

Course Description:

This course encourages students to be innovative and creative and to develop their ability to design high quality products. Through their studies, they will develop an awareness of the significance of design and technology on society, while also learning more about production processes and industrial practices. Students will be encouraged via the use of computers to build their design and technological abilities, and develop critical evaluation skills which they can employ in a variety of technical, aesthetic, economic, environmental, social and cultural contexts. As a result, students will also become discerning consumers of design and technology, able to make informed choices.

This course will use the SolidWorks CAD program extensively (installed on the PC's in the classroom). The assignments and design projects in the class will prepare you to take the CSWA-Academic exam and earn a certificate. This certification might give you college credit (it does at Purdue University), and also give you an advantage when searching for an internship or job.

Students entering this course should already have a mastery of the following concepts and possess the following skills:

- Good reading and writing skills.
- Good math and logical reasoning skills.
- Ability to work with other students.
- You should enjoy hands-on projects. We will design (sketching and CAD) and build many items in the workshop. If you don't like making things you will definitely NOT like this class.

Workload expectations for this course:

Honors-level. Most assignments can be completed in class, though if the work is not finished then, it becomes homework. There are multiple projects that students must manufacture in the workshop, and at times, in their home. Class time is given for most of the projects to be completed. There are standard honors-level assessments for the unit work at regular intervals, with class time dedicated for review. Coursework is organized and viewable anytime in Google Classroom.