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| Central Bucks High School East2013 Course SyllabusEngineering & RoboticsMr. Jovais |

**Course Description:**

In this course, students will be introduced to concepts found in the various fields of engineering. Students will be exposed to the engineering design process and then use it to solve problems related to basic engineering concepts. In addition to using computer numerical controlled machines, students will be introduced to high level 3-dimensional design software, and expected to use a variety of techniques and real-world technologies throughout the course.

**Course Objectives:**

 **With regular attendance and active participation students will be able to:**

1. Use technological and engineering design concepts to systematically solve practical problems.
2. Properly and safely use equipment, hand tools, and power tools to create solutions to problems.
3. Use 3D computer aided drawing software to create product designs for solutions to real-world problems.
4. Explain the importance of technology and the impacts technology has on society, the economy, and the environment.
5. Cooperatively work with others in a team setting.

**Course Grading:**

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| **Summative Projects (70%)** | **Formative Assignments (20%)** | **Responsibility (10%)** |
| * Projects
* Testing
* Presentation
* Portfolio
 | * Quizzes
* Teacher observations
* Written Assignments
* Worksheets
* Portfolio
 | * Meeting deadlines
* Getting to class on time
* Making up missed work
* Clean-Up Assignments
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**Class Guidelines:**

* Come to class on time and be prepared.
* Be respectful to the instructor and to all of your peers.
* Listen during instruction and demonstrations.
* Horseplay of any kind will not be tolerated
* Playing video games, watching videos, or browsing the net on separate devices is not allowed.
* You must ask permission to use ***any*** tool or machine.
* You are required to use all equipment in a respectful manner.
* Meeting deadlines in the real-world is essential. You must meet deadlines.
* Late assignments will be given partial credit. Depending on how late the assignment is could result in 0 points.
* Safety glasses must be used when necessary.
* Classroom rules and guidelines are subject to change throughout the course at Mr. Jovais’ discretion.

You will get out of this class what you put into it