

Ben L. Smith High School
The Academy of Advanced Manufacturing and Engineering
PLTW – Principles of Engineering – 10th Grade Syllabus
~ Mrs. Hill ~ Room 503
☎ (336) 294-7300 / (336) 338-8540 ✉ hillv2@gcsnc.com

Course Overview:

In Principles of Engineering, students will explore how modern engineers are helping improve the world through diverse engineering fields such as product design, robotics, mechanical design, as well as infrastructure and sustainability. You'll learn some of the cutting-edge tools of robotics, 3-D modeling, programming, and prototyping that engineers are using to solve problems today and for the future!

Course Units:

Unit 1: Mechanical Design

Unit 2: Application of Robotics

Unit 3: Energy in Action

Unit 4: Designing Infrastructure and Developing Sustainability

College Credit Opportunities:

High school students who take the new EOC Assessment will receive a detailed score report that highlights their subject-matter knowledge and mastery of in-demand, transportable skills. Students can use their test results to strengthen college applications or resumes or can send their score report directly to higher education institutions and employers, who may use it for admissions, scholarships, dual credit opportunities, campus experiences, internships, apprenticeships, industry certifications, and more.

Class Supply List:

- Black or blue ink pens
- Glue Sticks
- Headphones
- Graph Ruled Composition Book

Technology Components and Additional Resources:

There are various online educational resources utilized in this class. It is strongly recommended that students have technological devices to access these resources.

- Online student portal (www.mypltw.org)
- Canvas (<https://my.ncedcloud.org>)
- Onshape (<https://learn.onshape.com>)

Class Expectations:

Remember to listen when others are speaking.

Everyone has the right to their own opinion.

Strive to form a safe, caring classroom community.
Participate, come to class prepared and have fun.
Encourage one another and be a positive leader.
Challenge yourself and try new things.
Take responsibility for your actions.

Class Consequences:

1st Offense: Warning (Verbal)
2nd Offense: Parent Call/Conference
3rd Offense: Lunch/Afterschool Detention
4th Offense: Administration Referral
*Severe disregard for school or classroom expectations (i.e., fighting), will result in an automatic referral to administration. *

Grading System:

Nine-week grades will be calculated based on the average grade earned in the following categories:

Classwork - 40%	Homework/Engineering Notebook – 10%
Projects/Tests – 35%	Quizzes – 15%
Final Exam - 20%	

Late/Make-up Work Policy:

All work must be completed and submitted on time. I will accept late work; however, points will be deducted. For excused absences, students will be given two days for each day absent to make up work. It is the student's responsibility to get all assignments when he/she is absent.

Academic Honesty:

Any work submitted by the student shall be his/her own. Work taken from others is unacceptable. Any doubts will commence the completion of an alternative assignment or a zero on the submitted work.

Electronic Devices:

Access to all electronics, other than students GCS-issued Chromebooks, is prohibited for the entire class period unless given permission from the teacher. (**BLS Electronic Device Policy**)

Parent-Teacher Communication:

Parent-Teacher communication can significantly impact a student's long-term success and increase parent engagement and involvement in class and school wide events. To stay connected and receive information sign up with **Remind**.

Safety Statement:

In this course students will have the opportunity to use various tools and equipment. Appropriate instruction in the safe operation of these tools and equipment is given and close supervision is always maintained. Although every precaution is taken to prevent accidents, a certain risk is involved due to the nature of the experience, the age of the student, and the learning

environment. I am asking for your cooperation in impressing upon your child the importance of being careful. This will back up the instruction that is given in school to **“THINK SAFETY”** at all times.

Let's have a great year!

Sincerely,
Mrs. Hill

The best way to predict the future is to create it!