*RETURN THIS SIGNED COPY TO THE TEACHER. IF YOU NEED A COPY, PLEASE REFER TO THE GOOGLE CLASSROOM OR THE SCHOOL WEBSITE.*

**IMPORTANT INFORMATION**:

* This course uses a “Project Lead the Way” curriculum ([www.pltw.org](http://www.pltw.org)) entitled “Introduction to Engineering Design” AND standards for courses DDT 111 and DDT 144 from Calhoun Community College (CCC).
* Each student will take an industry certification test on Solid Edge CAD software.
* IED is a Dual-Enrollment course in which the students receive academic credit from both Hartselle High School and CCC. Each student will enroll as a student at CCC and will earn **6 hours of college credit** with NO COST to the student. The student will also receive **2 COURSE CREDITS** **at HHS**.

**COURSE FEES:**

The total fee for this course is $40 which is the sum of $20 for course materials, $5 for membership in the Technology Student Association (TSA), and $15 for an Engineering Academy t-shirt. All other required materials will be provided.

**FUNDRAISERS:**

We will conduct fundraisers during the school year so that each student has the opportunity to earn enough to pay for field trips, including the (tentatively planned) 2025-2026 field trip to Universal Studios in Orlando. Additional funds that are earned will go directly into the program to purchase lab materials for student benefit. Every student is encouraged to participate in any fundraisers.

**FIELD TRIPS:**

Students will have the opportunity for two field trips during the school year, one per semester. The cost will vary depending on the destination and the level of student participation in fundraisers.

**SOCIAL MEDIA:**

The Engineering and Computer Science Academy has two social media accounts - “Hartselle High Engineering” on Facebook and “hartsellehighengineering” on Instagram. As the teacher, Mrs. Pittman will post pictures about classroom activities throughout the year. IF YOU DO NOT WANT YOUR CHILD’S PICTURE and/or NAME TO BE POSTED ON SOCIAL MEDIA, please inform Mrs. Pittman using the contact information above. Otherwise, your signature on this form acts as consent for your child’s image to appear on social media.

**COURSE GOALS:**

* Learn to be a problem solver
* Expand understanding of what it means to be an engineer [*Embedded Literacy*]
* Gain knowledge of how to sketch and communicate through design to include:
	+ Use proper drafting tools and equipment
	+ Draw geometric figures and construction [*Embedded Numeracy*]
	+ Sketch and draw orthographic views of objects
	+ Demonstrate proper lettering techniques
* Develop skills in 3D drafting software (Solid Edge) to include:
	+ Manipulate the Cartesian coordinate system and working planes
	+ Create and modify wireframe models
	+ Create and modify solid models
	+ Produce 2D drawings from models
* Use teamwork, hard work and the engineering design process to create and design.
* At the end of the second semester, the student will complete a culminating project using major skills gained in the Solid Edge CAD software.

**ASSIGNMENTS:**

* Student grades are based on INDIVIDUAL and GROUP assignments.
* Some activities will demand the ability to work together in groups.
* Late work will be accepted for ONE WEEK after the original assignment due date for 70% credit.
* Assignments that are over one week late will not be accepted for any credit.
* Assignments that are not the original work of the student will receive ZERO credit.

**PLTW CURRICULUM OVERVIEW:**

Unit 1 - Design and Problem Solving

Unit 2 - Assembly Design

Unit 3 - Thoughtful Product Design

Unit 4 - Making Things Move

**COURSE EXPECTATIONS:**

1. Academic Honesty – All students are expected to do their OWN work as well as participate in groups
2. Respect others and other people’s property at all times
3. Speak at appropriate times, using appropriate voice and language
4. Follow directions
5. NO FOOD OR DRINK ALLOWED IN LABS
6. Adhere to all computer and internet policies
7. No cell phones unless the use is approved by teacher for educational purposes
8. Adhere to all safety rules
9. Students are responsible for cleaning up after themselves
10. **Have fun…and learn great things!**

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**STUDENT NAME STUDENT SIGNATURE DATE**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_**

**PARENT/GUARDIAN NAME PARENT/GUARDIAN SIGNATURE DATE**