



Welcome to

Introduction to Engineering Design

I'm your teacher:

Mrs. Gaines

- **13th year teaching** at Bob Jones High School with experience teaching 4 different engineering classes and 3 different math classes
- School sponsor for **Society of Women Engineers** and **Patriot Racing Teams**
- Married to an engineer and **mom to two girls**, Kay (9) and Glenne (7)
- Bob Jones High School graduate
- Bachelor of **Aerospace Engineering Degree** from Auburn University
- Industry experience working at Redstone Arsenal's AMRDEC
- I come to work every day because of **YOU**.
- This is my **dream job!**

What we'll do in this class:

- Learn about and use the **Engineering Design Process**
- Think creatively and complete design challenges
- Study **measurement** and **statistics**
- Master the basics of **hand drafting**
- Use 3D **Computer-Aided Design (CAD)** Software called Onshape to sketch, part model, assemble, and draft your designs
- **3D Print** your CAD designs on our three classroom **Creality EnderPro 3D Printers**
- Complete a 6-part in-class **employability series** led by Madison City Schools Career Coach
 - Career Education
 - Resume Creation
 - Mock Interview**
 - Financial Literacy and Budgeting
 - Engineering Panel

What you will need:

1-inch 3 ring **binder** with pockets (any color)
Scientific **calculator**

Mrs. Gaines will give you your own pad of **engineering paper** to use during this course!

Classroom Needs:

White 8½ x 11" copy paper
Kleenex
Dry erase markers
Paper towels

Follow me on Twitter!

@bjhsEngineering

Email me!

jggaines@madisoncity.k12.al.us