About GMB:
- Based in Holland, MI
- Full service architecture and engineering firm
- Works in the Higher Education, Healthcare, Corporate and K-12 sectors
- Have designed most buildings on Calvin’s campus

My Department:
- I worked closely with the mechanical engineers this past summer
- The mechanical department deals with:
  - HVAC system design
  - Heated water systems
  - Building energy analysis
- They recently switched design software to Revit

Responsibilities:
- Learned about architectural, MEP design
- Used the BIM (Revit) software for mechanical systems design and equipment design
- Responsible for converting Microstation 2-D details into Revit
- Problem shoot existing equipment in Revit
- Assisted engineers on their projects, whether it was on systems design, or creating equipment for their use
- Attend mechanical department meetings and take minutes
- Worked on project documentation i.e. legends, symbols, and details

Revit: Family Creation
- A “family” in Revit is a “smart” piece of equipment, in the software, that represents a real-life piece
- Design work and analysis can be combined by the way the pieces of a system interact together (based upon the class of system and how its connected)
- Each family has engineering data programmed into it for analysis, and for equipment schedules
- An AHU can provide a certain amount of pressure and there are set pressure drops based upon system layout, so analysis at every point in the system can be run

Revit: Projects
- Engineers now design the whole building as a 3-D model for customer understanding, as well as accountability
- Initial design is done in plan view and then elevation changes are done from an elevation view
- Analysis is run on system to find problems in the design like interferences in ducts
- Project documents can be auto-populated i.e. schedules