**What is CADD?**

Students learn to create virtual models of 3D objects such as a chair, a motorcycle, home or an office building. The students then learn to prepare technical drawings and plans from the 3D models. They use software to convert the designs of engineers and architects into technical drawings and plans. Workers in production and construction use these plans to build everything from microchips to skyscrapers.

**Duties:**

- Design and prepare plans using 3D Modeling (CADD) software
- Produce effective product designs by using their understanding of engineering and manufacturing techniques
- Add structural details to architectural plans from their knowledge of building techniques
- Specify dimensions, materials, and procedures for new building projects or products
- Work under the supervision of engineers or architects

Many drafters are referred to as CADD operators. With CADD systems, drafters create and store drawings electronically so that they can be viewed, printed, or programmed directly into automated manufacturing systems.

Patrick Henry Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, telephone number 404-679-4501) to award the associate degree.

Patrick Henry Community College does not discriminate on the basis of race, color, national origin, sex, or disability in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policy: Affirmative Action Coordinator, Francis T. West Hall, room 148, (276) 656-0212.

From here, **YOU** can go anywhere.
Reasons to consider CADD at PHCC:

1. Very nicely equipped Advanced Modeling Lab. Each student station has two 22” Monitors, run by Quad-Core processors. Each station is linked to an advanced computer control system called Robotel which allows the instructor and students to share control of monitors, keyboards and mice. It allows for more effective computer training environment.

2. Our lab has the following software: Autodesk Revit, Inventor, AutoCAD, Fusion, 3D Max, Mudbox, Alias Design, Navisworks, and Delcam FeatureCAM.

3. Students have full and FREE access to all software to download on their own computers. Student licenses last for three years.

4. The lab has an industrial, high precision (.0004), high speed (43,000RPM), twenty tool holder HASS CNC Milling machine. The student can design a virtual part in Inventor, then create the necessary code with FeatureCAM to machine the part on the HASS milling machine.

Pay:

The average annual wage of CADD modelers in the USA was $53,130 in May 2012.

The average wages for detailed modeling occupations in May 2010 were as follows:
- $53,020 for architectural and civil drafters
- $48,810 for mechanical modelers
- $46,430 for electrical and electronics drafters


Important Qualities:

Critical-thinking skills. Drafters/Modelers help the architects and engineers they work for by spotting problems with plans and designs.

Detail oriented. Drafters/Modelers must pay attention to details so that the plans they are helping to build are technically accurate to all detailed specifications.

Interpersonal skills. Drafters/Modelers must work closely with architects, engineers, and other designers to make sure that final plans are accurate. This requires the ability to take advice and constructive criticism, as well as to offer it.

Technical skills. Drafters/Modeler in all specialties must be able to use computer software, such as CADD. They must have the ability to understand 3D shapes created in 3 Dimensional spaces, and to work with database tools, such as BIM.

Time-management skills. Drafters often work under deadlines. They must be able to produce their output according to set schedules and so must plan their time well.