

CAD I - Dual Enrollment

VCCS - DRF 114 - Drafting I

Teaches geometric construction, orthographic projection, sections and conventions, pictorial drawings, isometric principles, oblique drawing, and dimensioning. Part I of II.

Lecture 1 hour. Laboratory 6-9 hours. Total 7-10 hours per week.

3 Credits

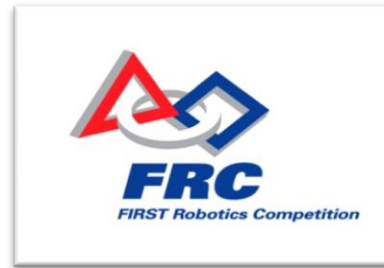
CAD II – Dual Enrollment

VCCS - DRF 201 - Computer Aided Drafting and Design I

Teaches computer-aided drafting concepts and equipment designed to develop a general understanding of components of a typical CAD system and its operation.

Lecture 2-3 hours. Laboratory 2-3 hours. Total 4-6 hours per week.

3 Credits



Wythe County Technology Center

1505 West Spiller Street
Wytheville, VA 24382
276-228-5481

<http://wctc.wythe.k12.va.us/Welcome.php>

Non-Discrimination Notice In accordance with Federal law and U.S. Department of Agriculture policy, Wythe County Public Schools is prohibited from discriminating on the basis of race, color, national origin, sex, disability, or age in its programs and activities.

WCTC

Computer Aided Design



Wythe County Technology Center

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Wytheville, VA 24382
276-228-5481

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Drafting/Autocad is a two-year program in which students develop drawings using mechanical and computerized methods. This program is for students who wish to enter the technical fields of designing, illustrating, and drafting immediately after high school graduation. Various types of drawings: architectural, topographic, engineering, and detailed computer-aided drafting (CAD) are introduced.

Students study and use the latest versions of Autocad, the industry standard. In addition to Autodesk products students will use SolidWorks 3D modeling software, Rhino 4.0 and Blender animation software.

Students will work with latest version of Autodesk® Design Academy, a pre-engineering and pre-architecture program exclusively for Secondary Schools. Design Academy includes:

- Autodesk® AutoCAD 2011
- Autodesk® Revit Architecture 2011
- Autodesk Inventor® Professional Suite 2011
- SolidWorks
- Rhino 4.0
- Blender 2.0

Pre-Requisites include:

That the student possesses the basic math and literacy skills that will be needed to be successful in any career field.

**Reasons to Consider Technical Training
The opportunity to gain Dual Enrollment
Credit through the Virginia Community
College System**

CAD I – DRF 114 (3 Credit Hrs.)

CAD II – DRF 201 (3 Credit Hrs.)

**Technically skilled people are in high demand
world-wide.**

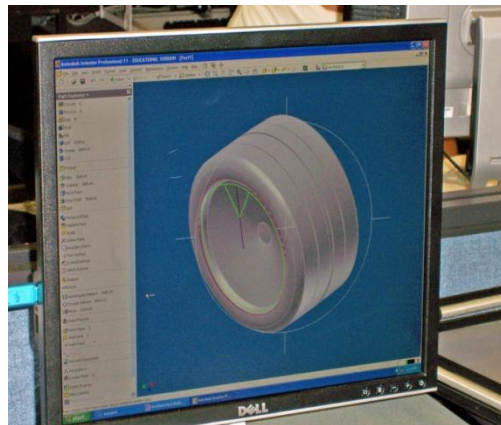
**Get a head start on a career by gaining
knowledge in a field of study before going to
college.**

Careers could include:

- **Technical & Mechanical Design 3D Modeling**
- **Architectural Design and Drafting (Both 2D and 3D)**
- **Civil Engineering**
- **Aerospace Engineering Design**
- **Automotive Design**
- **Electrical Engineering Design**
- **Computer Component Design**
- **Game Technology and Animation Careers**

**Be more self-sufficient by gaining skills that
other people usually have to pay to acquire.**

**Build a resume and skill set before graduating
high school with hands-on technical training.**



Computer Aided Design (CAD) I (8530)

Grade level: 10*, 11 Credit: 2.5

Prerequisites: Recommend completion of Geometry or concurrent enrollment; * With the approval of the WCTC Principal and the student's High School Principal.

Students are introduced to the theory and the manipulative skills necessary to produce and complete drawing

based on the ideas and sketches of engineers, architects, and designers. Students practice the fundamentals of

design and prepare mechanical, structural, and architectural plans, using basic CAD operations.

DRF 114, Drafting I is offered at WCTC as an optional dual credit class in conjunction with WCC provided applicable prerequisites are met.

Computer Aided Design (CAD) II (8531)

Grade level: 11, 12 Credit: 2.5

Prerequisites: Computer Aided Design I

Students master the theory and the manipulative skills necessary to produce complete and accurate drawings based on the ideas and sketches of engineers, architects, and designers. They design and prepare mechanical, structural, and architectural plans.

DRF 201, Computer Aided Drafting and Design is offered at WCTC as an optional dual credit class in conjunction with WCC provided applicable prerequisites are met.