

Computer Aided Design Architectural Graphics



at the Frederick County Career & Technology Center

Career Options:

With a 4-year college degree: Architect, Architectural Engineer, Interior Designer, Architectural Animator, Project Estimator.

With a 2-year college: CAD Designer, Architectural Assistant, CAD Operator, Construction Management, Software Technician.

Direct entry into the workforce: CAD Operator

Overview: The Architectural CAD program teaches the student to use AutoCAD software and develop skills in the production and organization of architectural drawings and plans. Students research materials and methods of construction, building codes and construction specifications in the development of designs, layouts and site plans. Students also install and configure computer hardware and software

The Architectural CAD program is designed for students who plan to enter college or a technical institution in the architectural/computer design technology field. Although it is a two year program, students may complete one to four semesters before graduation and may apply to start in the fall or spring semesters. Students spend one half day (AM) in the program and the other half at their home school or in a workstudy position.

Value Added:

- ❖ Students may earn 6 articulated college credits in FCC's Construction Management Program. Concurrent enrollment in the Introduction to Construction Management class can provide an additional 3 credits at FCC.
- ❖ Students may earn 12 articulated college credits in FCC's CAD Program.
- ❖ Students who are successful in this program can receive college credits at the following institutions: Frederick Community College, Catonsville Community College, Thompson Institute of Technology.
- ❖ Students may apply for entrance into the ACE Mentoring program at Bechtel Corp.
- ❖ Students have the opportunity to test for and receive credits in CAD at most four-year colleges.

Application Process: Current 10TH grade students should schedule a shadow visit through their home school counselor. Shadowing allows students to determine if the CAD program is appropriate for their career goals and allows the CAD instructor to evaluate the student's interest and aptitude. Students will receive an application to complete, which must also be signed by their guidance counselor and a parent/guardian. In addition to interest and aptitude, applicant's attendance and GPA are considered in the acceptance process.

For additional information:

Log on to http://www.careertech.net/cad_architectural.htm

Contact the instructor at 240-236-8536

Frederick County
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What are You Doing?



Program: **CAD/Architectural Graphics**

Post-Secondary Education: 4 year college degree

Careers: Architect, Architectural Engineer, Interior Designer, Architectural Animator

This sample high school schedule prepares students to pursue a four year college degree in the computer aided design industry

Grade 9	Grade 10	Grade 11	Grade 12
English 9 Honors or Merit	English 10 Honors or Merit	English 11 Honors or Merit	AP English or English 12 Merit
Geometry	Algebra 2	Pre Calculus -or- Advanced Algebra w/Trig	AP Calculus I
Intro Chem/Physics Honors –or- Algebra Based Physics	Biology Honors	Physics	AP Physics
Government	Modern World History	American Studies 2	Workstudy or Elective
Physical Education/Health	Fine Art elective	CAD/Architectural Graphics IA 533085	CAD/Architectural Graphics 2A 534241
Technology Education Credit	Elective		
Foreign Language	Foreign Language	CAD/Architectural Graphics IB 533086	CAD/Architectural Graphics 2B 534251
Elective	Elective		

Color Key

	Elective Courses
	Required Courses for Graduation
	CTE Completer Courses

Frederick County
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What are You Doing?



Program: **CAD/Architectural Graphics**

Post-Secondary Education: 2 year technical school/AA degree, apprenticeship program or military training

Careers: CAD Designer, Architectural Assistant, CAD Operator, Construction Management, Software Technician

This sample high school schedule prepares students to continue their training at a community college, technical school, or in the military.

Grade 9	Grade 10	Grade 11	Grade 12
English 9 Honors or Merit	English 10 Honors or Merit	English 11 Honors or Merit	AP English or English 12 Merit
Algebra 2	Geometry	Intro to Calculus	Calculus 1
Intro Chem/Physics Honors or Merit	Biology Honors or Merit	Physics elective	Work study or Elective
Government	Modern World History	American Studies 2	Work study or Elective
Physical Education/Health	Fine Art elective	CAD/Architectural Graphics IA 533085	CAD/Architectural Graphics 2A 534241
Technology Education Credit	Elective		
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	CTE Completer Courses

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What are You Doing?



Program: **CAD/Architectural Graphics**

Post-Secondary Education: none required

Careers: CAD Operator

This sample high school schedule prepares students to enter directly into the workforce in the Computer Aided Design industry

Grade 9	Grade 10	Grade 11	Grade 12
English 9 Honors or Merit	English 10 Honors or Merit	English 11 Honors or Merit	AP English or English 12 Merit
Algebra IA	Geometry	Applied Algebra/Geometry	Contemporary Math
Intro Chem/Physics	Biology	Environmental Science	Work study or Elective
Government	Modern World History	American Studies 2	Work study or Elective
Physical Education/Health	Fine Art elective	CAD/Architectural Graphics IA 533085	CAD/Architectural Graphics 2A 534241
Algebra IB	Technology Education Credit		
Elective	Elective	CAD/Architectural Graphics IB 533086	CAD/Architectural Graphics 2B 534251
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